

THE COST MANAGEMENT AND CONTROL OF INTER-ORGANISATIONAL
RELATIONSHIPS: A CASE FROM THE GREEK SHIPPING INDUSTRY

By

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ABSTRACT

Inter-organisational cost management and control (IOCM and control) is generally defined as a means whereby independent organisations protect their interests and coordinate resources to create value from their inter-organisational relationships (IORs). While research in IOCM and control has been informed by a variety of theoretical perspectives, there is little which has employed structuration theory (examples are Free, 2008; Seal *et al.*, 2004; Sydow & Windeler, 1998). Here, it is argued that Rob Stones' recent work is a development of the theory which shows good promise for research in this area. A field study at a Greek shipping organisation reveals the processes and dynamics of IOCM and control in practice. Despite public proclamations of long-term relationships with suppliers and buyers, the research uncovered a network of asymmetrically dependent relationships, which produced and reproduced predominantly arm's-length practices. Distrust and paternalism within the organisation spilled over to the management of its inter-organisational domain, while the structural influences of environmental institutions reinforced organisational agents' perspectives of IOCM and control and limited consideration of alternatives. Finally, this study argues that the notion of multiple and overlapping social systems as well as of learning and change can emphasise a role for certain theoretical constructs to implicate the skilful deployment of resources, which is central to economic phenomena. Such constructs refer to dialectics of control, path dependency, isomorphism, contradiction and praxis. It is proposed that future research in IOCM and control employing Stones' version of structuration, would benefit from explicit use of these constructs.

DEDICATION

To my parents Capt. Gregoris and Angeliki Glyptis, my brother Angelos, and to the loving memory of my grandmothers Kaliope O. Bousses and Maria L. Glyptis who taught me how to scribble the alphabet and read.

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TABLE OF CONTENTS

LIST OF ABBREVIATIONS	1
CHAPTER 1	3
INTRODUCTION	3
1.1. Preamble	4
1.2. Statement of the motivation for the research	8
1.3. Aims of the research and research questions	10
1.4. Main findings and conclusions from the research	12
1.5. The structure of the thesis	14
CHAPTER 2	17
THE COST MANAGEMENT AND CONTROL OF INTER-ORGANISATIONAL RELATIONSHIPS: A LITERATURE REVIEW	17
2.1. Introduction.....	18
2.2. A review of theoretical frameworks	19
2.2.1. Functionalist theoretical frameworks	20
2.2.1.1. Transaction Cost Economics	21
2.2.1.2. Agency Theory and Incomplete Contracting.....	24
2.2.1.3. Strategic Management theory, Industrial Economics and Resource-based theories	27
2.2.1.4. Organisation theory and Contingency theory.....	30
2.2.2. Non-functionalist theoretical frameworks.....	32
2.2.2.1. Actor Network Theory	34
2.2.2.2. Industrial Network approach	36
2.2.2.3. Structuration Theory.....	37

2.3.	Modes of IOCM and control.....	42
2.3.1.	Modes of inter-organisational control	42
2.3.1.1.	(Incomplete) contracts.....	42
2.3.1.2.	Open-book accounting	44
2.3.1.3.	Performance measurement, incentives and rewards	48
2.3.1.4.	Integrated Information systems.....	50
2.3.1.5.	Qualitative and informal control mechanisms	52
2.3.1.6.	Issues of trust and the management control of IORs	54
2.3.1.7.	The importance of power in the management of IORs	62
2.3.2.	Modes of inter-organisational cost management (IOCM).....	68
2.3.2.1.	Value chain analysis (VCA).....	69
2.3.2.2.	Total cost of ownership (TCO)	71
2.3.2.3.	Target Costing.....	73
2.3.2.4.	Price-quality-functionality trade-offs and minimum cost investigations	75
2.4.	Summary of research to date	77
2.4.1.	Insights offered from functionalist theories.....	77
2.4.2.	Insights offered from non-functionalist theories	79
2.4.3.	Contributions to modes of inter-organisational control.....	82
2.4.4.	Contributions to modes of inter-organisational cost management	85
2.5.	Opportunities for further research.....	87
2.6.	Recapitulation	91
CHAPTER 3		94
THEORY AND METHODOLOGICAL CONCERNS		94
3.1.	Introduction.....	95

3.2.	The argument for ‘alternative’ research in management accounting.....	96
3.3.	Why Structuration Theory?	100
3.3.1.	Why not Actor Network Theory or the Industrial Network Theory?	101
3.3.2.	Structuration Theory and the potential of Stones (2005)	104
3.3.3.	Why Stones’ (2005) and not Giddens’ Structuration Theory?.....	105
3.3.4.	Presentation of Stones’ (2005) quadripartite framework	111
3.3.4.1.	External structures	111
3.3.4.2.	Internal structures within the agent	113
3.3.4.3.	Active agency	117
3.3.4.4.	Outcomes	119
3.3.5.	Stones’ (2005) quadripartite framework and methodological bracketing.....	121
3.3.6.	Stones’ (2005) relevance to undertaking the research	123
3.3.7.	Question-types to guide research following Stones (2005)	125
3.4.	Stones (2005) and a skeletal approach to empirical investigation.....	126
3.5.	An overview of the philosophical assumptions underpinning the research.....	128
3.6.	Recapitulation	130
CHAPTER 4.....		132
THE CASE STUDY SITE, RESEARCH DESIGN AND METHODS.....		132
4.1.	Introduction.....	133
4.2.	The argument for a case study approach in management accounting research	134
4.3.	Presentation of the industry and selection of the case organisation.....	137
4.3.1.	The industry context and some structural characteristics of relevance	138
4.3.2.	Selection of case study site and ethics.....	145
4.3.3.	The case study site	147

4.4. Research questions.....	152
4.5. Selection of appropriate research evidence collection methods	155
4.6. Recapitulation	162
CHAPTER 5	164
PRELIMINARY CONCERNS PRIOR TO CONSIDERING RESEARCH FINDINGS	164
5.1. Introduction.....	165
5.2. Issues that unfolded during the research and which influenced the research process ...	166
5.3. Research evidence analysis and interpretation	173
5.4. Criteria for grounding the research	182
5.5. Recapitulation	185
CHAPTER 6	187
FINDINGS FROM RESEARCH AT MARINECO.....	187
6.1. Introduction.....	188
6.2. Power asymmetries between MarineCo and its suppliers and customers	192
6.2.1. Power asymmetries in relationships with customers.....	192
6.2.2. Power asymmetries in relationships with suppliers	199
6.3. Power asymmetries and distrust within MarineCo	204
6.4. New technologies and controls at MarineCo	210
6.5. Regulatory requirements and industry practices.....	213
6.5.1. Regulatory requirements	214
6.5.2. Industry practices and MarineCo's IOCM and control with customers.....	218
6.5.3. Industry practices and MarineCo's IOCM and control with suppliers	226
6.6. Recapitulation	231
CHAPTER 7	234

DISCUSSION.....	234
7.1. Introduction.....	235
7.2. Employing Stones (2005) to address the research questions.....	236
7.2.1. Relationships with customers.....	237
7.2.2. Relationships with suppliers.....	242
7.2.3. Contributions to the literature of IOCM and control.....	249
7.3. A critical evaluation of Stones' (2005) and propositions for theory refinement.....	255
7.3.1. The notion of multiple social systems and learning and change.....	258
7.3.2. Theoretical concepts contributing to Stones' (2005) account of active agency.....	262
7.3.3. Theory refinements contributing to a structuration perspective of IOCM and control	266
7.4. A reflective account of the limitations of the research.....	270
7.5. Recapitulation.....	274
CHAPTER 8.....	275
CONCLUSIONS.....	275
8.1. Preamble.....	276
8.2. Main findings.....	276
8.3. Contributions.....	289
8.3.1. Contributions to practice/practitioners of IOCM and control.....	289
8.3.2. Contributions to literature.....	291
8.3.3. Contributions to theory.....	294
8.3.4. Contributions to the research strategy.....	298
8.4. Researcher's account of personal experience and learning.....	299
8.5. Suggestions for future research.....	301

APPENDIX	305
1. A Guide to the Case Study Research	306
2. Interview Schedule	318
REFERENCES	319

LIST OF FIGURES

Figure 3.1: The Quadripartite nature of Structuration (adapted from Stones, 2005, p. 85)	110
Figure 3.2: Agent-in-focus within a field of position-practice relations (adapted from Stones, 2005, p. 94).....	121
Figure 4.1: The research process articulated	157
Figure 5.1: The analytical path articulated	181
Figure 6.1: A representation of major clusters of position-practice relations within and outside MarineCo	193
Figure 6.2: A representation of the web of position-practice relations constituting MarineCo's IOCM and control practices	230
Figure 7.1: Position-practice relations articulated as a single-level network of interconnected nodes and influenced by abstract socio-historical forces (adapted from Stones, 2005, p. 128)..	262

LIST OF TABLES

Table 4.1: Loosely-structured interview questions in keeping with Stones' version of ST	158
Table 5.1: Modified loosely-structured interview questions in keeping with Stones version of ST	169
Table 5.2: The Coding Scheme	175

LIST OF ABBREVIATIONS

ABC: Activity-Based Costing

ANT: Actor Network Theory

BPR: Business Process Re-engineering

EDI: Electronic Data Interchange

ERP: Enterprise Resource Planning

IACS: International Association of Classification Societies

IMO: International Maritime Organisation

IOCM: Inter-organisational Cost Management

IORs: Inter-organisational Relationships

ISM: International Safety Management Code

ISO: International Organisation for Standardisation

JIT: Just In Time

LNG: Liquefied Natural Gas

MARPOL: Maritime Convention for the prevention of Pollution from ships

MCI: Minimum Cost Investigations

OCIMF: Oil Companies' International Marine Forum

OPA: Oil Pollution Act

P&I: Protection and Indemnity

PMS: In Chapter 2: Performance Measurement System; in Chapters 6, 7 and 8: Planned Maintenance System

PQF: Price-Quality-Functionality

Q&S: Quality and Safety

SCM: Supply Chain Management

SMA: Strategic Management Accounting

SMT: Strategic Management Theory

SOX: Sarbannes-Oxley Act

ST: Structuration theory

TCE: Transaction Cost Economics

TCO: Total Cost of Ownership

TMSA: Tankers' Management and Self Assessment

TVO: Total Value of Ownership

VCA: Value Chain Analysis

VLCC: Very Large Crude Carrier

VMI: Vendor Management Inventory System

WS: Worldscale

CHAPTER 1

INTRODUCTION

1.1. Preamble

Recent decades have witnessed an increase in various forms of inter-organisational relationships (IORs) such as joint ventures, strategic alliances, strategic partnerships and outsourcing relationships (e.g. Choi & Krause, 2006; Dekker, 2004; Håkansson & Lind, 2007; Kraus & Lind, 2007; Langfield-Smith & Smith, 2003). Such arrangements emerge from the need to coordinate activities and resources and involve “forms of cooperation between independent organisations” (Kraus & Lind, 2007, p. 269).

The establishment of IORs is attributed to globalisation and escalating competition, rapid technological development, increased technical complexity in production processes and associated needs for access to new markets, complementary resources, economies of scale and scope and sharing of investment risk (Child *et al.*, 2005; Kraus & Lind, 2007). These factors encourage organisations to concentrate on their core competencies and outsource to other expert organisations those activities they are unable to undertake efficiently in-house (Child *et al.*, 2005).

The increased appearance and importance, however, of IORs imposed new demands on management accounting to consider issues involved in the coordination of activities and resources that are outside an organisation’s legal boundaries. IORs motivated managers to re-emphasise their cost management and control practices and consider not only how activities and resources are performed within their organisations, but also how their counterparts’ performance has implications for their own organisations’ performance (Berry, 1994; Hopwood, 1996; Otley, 1994).

Against this context, a stream of publications emerged, which has intensified since the year 2000 following the calls of Otley (1994) and Hopwood (1996). This stream of research aimed to investigate how cost management and control practices traditionally adapted to sustain arm's-length transactions could be extended to account for transactions involving IORs and networks of cooperating organisations (Cooper & Slagmulder, 2004; Dekker, 2004; Gietzmann, 1996). As Gietzmann (1996) argued for example:

“traditional management accounting practices do not provide managers with the necessary information to assess whether or how to work closer with suppliers” (p. 613).

Existing research has largely focused on the investigation of practice through case studies and revealed that more or less cooperative long-term relationships were coordinated through a number of inter-organisational accounting and non-accounting based controls such as incomplete contracts, open-book accounting, target costing, value-chain analyses, integrated information systems, total cost of ownership, performance measurement and incentive schemes, and informal controls. This set of controls constitutes modes of ‘inter-organisational cost management and control’ (IOCM and control) through which organisations engage in information exchange, share resources, mutually bear risks and responsibilities, and collaboratively eliminate or modify activities with the aim to achieve joint cost reductions and create value (e.g. Coad & Cullen, 2006; Coad & Scapens, 2006; Cooper & Slagmulder, 2004; Cooper & Yoshikawa, 1994; Kulmala *et al.*, 2002).

At the same time, an increasing number of researchers highlighted the importance of power and trust to influence the nature of IOCM and control and, therefore, the parties’ efforts to coordinate activities and protect their interests from the potential opportunistic behaviour of their

counterpart (e.g. Dekker, 2004; Nooteboom, 1997; Tomkins, 2001). The importance of power and trust emerges from the fact that the coordination of IORs:

“is not centrally orchestrated as in hierarchical relationships [...] the independent parties themselves have to develop the means to achieve actions in concert” (Meer-Kooistra & Vosselman, 2006, p. 228).

Nevertheless, existing research in IOCM and control did not emerge from a theoretical vacuum. Instead, a number of different theoretical perspectives were employed to inform the research and this had a significant impact on its conclusions, emphasis and limitations. Most of the research, however, has been informed by functionalist theoretical perspectives, particularly from Transaction Cost Economics (TCE) and incomplete contracting (Håkansson & Lind, 2007; Kraus & Lind, 2007; Meer-Kooistra & Vosselman, 2006). Functional research has provided insights into the design of organisational forms and boundaries to minimise transaction costs; the design of contracts to anticipate opposing interests in IORs; the competitive positioning of organisations to manage interdependencies and resources; as well as the alignment of organisational forms and controls relative to certain organisational and environmental characteristics.

However, functional research has been criticised for its inadequacy to provide other than static, deterministic and general-level prescriptions on relationships between a given set of variables, ignoring the broader context within which these variables are located, e.g. a specific organisation, industry setting or network of IORs. In this respect, an increasing number of accounting scholars (e.g. Caglio & Ditillo, 2008; Coad & Cullen, 2006; Håkansson & Lind, 2007; Kraus & Lind, 2007; Meer-Kooistra & Vosselman, 2006) argued that research in IOCM and control should embrace theoretical perspectives that illuminate the *processes and dynamics* through which certain cost management and control arrangements are pursued at the expense of

others at local, i.e. *in-situ* settings. At this point, non-functionalist theoretical frameworks were seen as capable of addressing these calls because they approach IOCM and control practices as social phenomena that influence power relations and stimulate processes of change through their enactment at specific settings (Baxter & Chua, 2003). While, however, accounting scholars called for research in IOCM and control to embrace non-functional theoretical perspectives, there has been little research that addressed these calls (e.g. Chua & Mahama, 2007; Cuganesan & Lee, 2006; Free, 2008; Mouritsen *et al.*, 2001; Sydow & Windeler, 1998; Thrane & Hald, 2006).

For example, there has been some non-functionalist research that drew on Actor Network Theory (ANT) and the Industrial Network approach (Chua & Mahama, 2007; Cuganesan & Lee, 2006; Håkansson & Lind, 2004; Mouritsen *et al.*, 2001; Tomkins, 2001). Issues on the importance of agency and its interests to implicate management controls as well as issues of power and trust emerged from such research, which supplemented observations from other studies (e.g. Cooper & Slagmulder, 2004; Cox, 1999, 2001, 2004; Free, 2008; Johnsen & Ford, 2005) that cautioned against the appropriateness of collaborative IOCM and control under all circumstances. These research publications, however, while providing important insights, failed to address some key issues on the dynamic processes, which underpin the development and practice of IOCM and control and which mainly have to do with a consideration of the duality of structure with agency.

The opportunities for further research that emerged from these insights provided the impetus for undertaking this research, which will now be discussed in the Section that follows.

1.2. Statement of the motivation for the research

The introduction to the topic presented previously represents the researcher's condensed understanding of the main issues and developments recorded so far in IOCM and control. Given the aforementioned arguments in favour of non-functionalist research and the relatively little emphasis on the processes and dynamics underpinning IOCM and control, the researcher was attracted to a structurationist perspective to undertake field research in order to investigate the production and reproduction of IOCM and control practices. This motivation arose from a number of reasons that are outlined below.

To date, research whether it be from a functionalist or a non-functionalist theoretical perspective, has usually assumed that cooperation between organisations in IORs is central to the deployment of IOCM and control, even though there have been studies that have highlighted the role of power asymmetries and trust which question such assumptions (e.g. Cox, 1999, 2001, 2004; Frances & Garnsey, 1996; Free, 2008; Johnsen & Ford, 2005). Moreover, non-functionalist research approached organisations and their IORs not at the aggregate, organisational level, but at the individual or group of agents' level, something which revealed a complex nexus of interests and interdependencies mediating IORs and their cost management and control (e.g. Chua & Mahama, 2007; Håkansson & Lind, 2004).

While these studies largely focused on agency to highlight intended and unintended consequences from the management of IORs, and even though they recorded the failure of collaborative cost management initiatives due to power asymmetries and lack of trust, they did not provide adequate insights, with the exception of a few studies (Free, 2008; Sydow & Windeler, 1998) regarding the implications of structures in enabling and constraining action in

IOCM and control. Part of the motivation behind this research is to examine how forces, more or less distant from the management of IORs, influence a cooperative and trusting or competitive and dominating approach to their cost management and control.

In particular, the researcher sought to investigate the processes through which agents or groups of agents engage with structures to produce and reproduce IOCM and control practices and what is the role played by power, cognition, efficient resource management, norms, contradictions and adaptations. This motivation for structuration theory (ST) arose not only from the aforementioned implications for further research that the researcher derived from the few structurationist studies on the subject (e.g. Free, 2008; Seal *et al.*, 2004; Sydow & Windeler, 1998), but also from the fact that the recent refinement of the theory by Robert Stones in 2005 offered good promise to contribute significant insights on the aforementioned issues.

Meanwhile, the opportunity to undertake case study research in a shipping organisation based in Greece, namely MarineCo¹, while it was facilitated by the researcher's acquaintance with the industry and the setting, it also provided a novel area for research into the cost management and control of IORs. As far as the researcher is concerned there has been no other research in IOCM and control drawing from the shipping industry. The shipping industry and the specific case organisation offered many opportunities for studying relationships between agency and structure with implications for IOCM and control in terms of power asymmetries, resource allocations, meanings and norms. This is particularly because the shipping industry is characterised by the domination of its customers (i.e. charterers), strict regulatory requirements, and a nexus of institutional stakeholders that influenced MarineCo's IORs. Further, MarineCo

¹ This is a pseudonym that was employed to ensure the anonymity of the organisation.

provided an interesting setting because it is characterised by a highly paternalistic structure, suggesting power asymmetries, and also because it publicly espoused its pride in its long-term, cooperative relationships with suppliers and customers.

1.3. Aims of the research and research questions

The overall aim of the research was to *examine the forces that facilitate and/or hinder the adoption of cooperative cost management and control practices in IORs*. This aim was pursued through themes that emerged from a review of the literature as worthy of further research, namely:

1. Examine how processes of embedding trust or a dominating perspective within an organisation influence the modes of IOCM and control it enacts.
2. Examine the processes through which industry practice as constituted by agents or groups of agents distant to the organisation has implication for power asymmetries and trust in MarineCo's IORs, influencing choice of cooperative or competitive modes of IOCM and control.
3. Investigate whether certain modes of IOCM and control are relevant for less complex IORs, i.e. non-manufacturing ones, such as for reducing risk and further embedding the relationship.
4. Investigate how MarineCo's internal accounting and control systems and overall agendas interrelate with its inter-organisational control processes and what are the effects, i.e. a cooperative or competitive perspective, to its IORs from any interrelationship thereto.

These themes were then employed in conjunction with the theoretical opportunities offered by Stones' version of ST to formulate research questions, namely:

1. What are the IOCM and control practices of MarineCo? Do these support a cooperative and mutually beneficial or a competitive approach? Are they formal, accounting-based and bureaucratic or informal?
2. Why has MarineCo established these IOCM and control practices and how have these practices been maintained or changed in recent years?
 - 2.1 What has been the role of MarineCo's organisational structure in embedding a cooperating and trusting or a competitive and dominating perspective in the cost management and control practices of its IORs? How did this take place?
 - 2.2 What has been the role of relational organisations such as suppliers and customers or other significant agents outside MarineCo, such as regulatory bodies, in influencing the cost management and control practices it enacts in its IORs? How did this take place?
3. What are the intended and unintended effects of MarineCo's IOCM and control practices and how have these affected or are likely to affect in the future the management of the organisation's IORs?

These questions were employed to reveal the phenomenologies, hermeneutics and action of agents within MarineCo in respect of the organisation's IOCM and control practices. It should be clarified that 'phenomenology' refers to agents' focus on those objects that impinge on their role or position. However, Stones (2005) employed both phenomenology *and* hermeneutics to refer to agents' interpretation and knowledge of the objects, which they focus upon to guide their action. According to Stones (2005), the hermeneutic-phenomenological capacities of agents involve them drawing from their internal structures to decide about how to 'go on' in social interaction within a web of position-practice relations, which is the object of their focus. In this respect, the hermeneutic-phenomenological capacities of agents involve them interpreting how networked

others place expectations, opportunities and constraints on the way these agents act (Stones, 2005). There follows an overview of the main findings and conclusions that were drawn from the research.

1.4. Main findings and conclusions from the research

Research at MarineCo revealed findings that were unanticipated at the outset. While the researcher had approached the organisation with the understanding that it relied on cooperative long-term relationships with suppliers and customers, it turned out that operational personnel at MarineCo regarded their relationships with the majority of them to be competitive, i.e. arm's-length in nature. These were supplemented for critical relationships with some cooperative cost management and control initiatives. Further, in a few circumstances MarineCo's relationships with customers developed into joint ventures (JV), however, even in those cases cost management and control largely relied on standard contract provisions and services from third-party organisations that did not involve genuinely cooperative initiatives in the sense of direct collaboration by the parties to pursue mutually beneficial outcomes.

Research at MarineCo highlighted that the organisation's IOCM and control of supplier and customer relationships was implicated by an array of structures that emerged both from within and outside the organisation's boundaries. These structures conditioned power asymmetries within MarineCo and distrust by top management of the way MarineCo middle level managers coordinated IORs. Previous experiences of fraudulent action at MarineCo with respect to the cost management of supplier relationships, combined with a highly paternalistic management structure enforced by the founder of the company, stimulated and reproduced

distrust and embedded an arm's-length perspective in cost management and control. Distrust at MarineCo spilled over to the inter-organisational domain and influenced its relationships with suppliers and customers. Efforts to address distrust and dependence on suppliers were found in the technologies and control functions that were introduced at MarineCo, and which had not only intended but also unintended consequences. In turn, the introduction of these technologies and control functions implicated connections and interdependencies between the organisation's internal agenda and control systems on the one hand, and its IOCM and control practices on the other.

At the same time, stakeholders positioned outside MarineCo's boundaries, including suppliers, customers, their self-regulating institutions as well as regulatory requirements and industry 'best practice' publications comprised a complex web of mutually reinforcing factors that produced and reproduced MarineCo's perspective of IOCM and control. For example, MarineCo managers were seen to draw from their interpretations of the opportunities and constraints that their immediate, i.e. within MarineCo, and more distanced context placed, and accordingly reproduced its structures, which highlighted the domination of customers over MarineCo and the relative domination of MarineCo over suppliers. MarineCo managers ameliorated the organisation's dependence through employing informal management controls and profit sharing agreements in relationships with customers, and a rank-based evaluation scheme in relationships with suppliers. Finally, the research highlighted the reinforcing role of distant influences on MarineCo, which provided impetus for the reproduction of its IOCM and control practices and structures, and in some cases their change.

As mentioned above, Stones' framework contributed significant insights to the interpretation of the case. However, it is argued that while Stones approaches the structuration of economic phenomena, as IOCM and control practices are, at a more substantive level, he overemphasises certain ontological and epistemological concepts, i.e. agents' hermeneutics and their phenomenology of structures, at the expense of others, i.e. agents' action. It is proposed that Stones' framework needs to place more explicit attention on how structures of domination implicate, along with legitimation and signification, notions of efficiency and effectiveness in agents' actions. Moreover, it is suggested that ontological concepts, which implicate agents' praxis, i.e. the notion of multiple and overlapping social systems, structural contradictions, path-dependency, dialectics of control and co-evolutionary processes, can provide the framework with significant potential. It is concluded in this respect, that should Stones' framework contribute a better understanding of IOCM and control, the aforementioned concepts need to be accounted for in order to highlight the processes involved in the efficient and effective deployment of resources, which are central to IOCM and control.

There follows an outline of the structure of the thesis.

1.5. The structure of the thesis

The remainder of the thesis is organised as follows:

Chapter 2 reviews the literature of IOCM and control. It pays explicit attention to the multitude of theoretical perspectives that have underpinned existing publications so as to emphasise that their conclusions and arguments are not neutral from a theoretical point of view. Then the literature is distinguished according to its emphasis on specific modes of IOCM and

control. Finally, the Chapter summarises the contributions of extant research and proceeds to identify themes worthy for further investigation, highlighting the potential for ST to guide the research.

Chapter 3 embarks on the methodological and theoretical considerations underpinning this research. It argues that for research to contribute to our understanding of accounting practice it needs to examine it in-context. More importantly the Chapter develops the argument that ST, and particularly its refinement by Stones (2005), can provide a valuable framework to guide the research as compared to Giddens' version, ANT and the Industrial Network approach. Finally, the Chapter argues that theory should be employed in a guiding, rather than a prescriptive manner and presents the philosophical assumptions underpinning the research.

Chapter 4 argues in favour of the case study as the appropriate research strategy for the purposes of the research and its philosophical underpinnings. Thereafter, focus shifts to an introduction to the Greek shipping industry and MarineCo. There follows a development and presentation of the research questions and the research methods that were employed. Chapter 5 proceeds to explain some issues that arose during the early stages of the case study work, which influenced the application of the research methods. Further, it presents a detailed discussion of the steps that were taken to analyse the research evidence so as to enhance the credibility of the research.

Chapter 6 presents the findings from the case study at MarineCo, while Chapter 7 proceeds with a discussion of findings that involved three major aspects. The first employs Stones (2005) to address the research questions and suggest contributions to the existing

literature. The second engages with a critical evaluation of Stones' version of ST, while the third provides a reflective account of the limitations of the research.

Finally, the thesis concludes with Chapter 8, where the contributions of the study, along with suggestions for future research are provided.

CHAPTER 2

THE COST MANAGEMENT AND CONTROL OF INTER- ORGANISATIONAL RELATIONSHIPS: A LITERATURE REVIEW

2.1. Introduction

This chapter reviews the literature of the cost management and control of IORs² with the objective of providing a critical account of the research to-date, suggesting areas that warrant further research, and providing a basis to explain how *this* research makes a contribution. While this review has considered previous reviews on the subject, i.e. of Kraus and Lind (2007), Håkansson and Lind (2007) and Caglio and Ditillo (2008), it moves a step further in that it attempts a synthesis of their insights and considers additional material³ before it identifies opportunities for further research.

One characteristic of the IOCM and control literature is that it has been informed by a variety of theoretical approaches. The diversity of theories employed requires that researchers are familiar with them because “how the empirical problems are formulated is not neutral from a theoretical point of view” (Håkansson & Lind, 2007, p. 887). For this purpose, the literature is distinguished into two broad groups, one that draws from ‘functionalist’ and another that draws from ‘non-functionalist’ theoretical approaches. According to Håkansson and Lind (2007), the functionalist or what they call ‘market-based’ group “includes the most used theoretical approaches and has a distinct structure” (p. 887), whereas the non-functionalist group comprises theories that are heterogeneous in their philosophical assumptions but which collectively form a ‘non-positivist enterprise’ to functionalist work (see also Baxter & Chua, 2003, p. 97).

² The terms ‘cost management and control of IORs’ and ‘IOCM and control’ are used to describe not only formal *accounting-based* controls such as IOCM techniques or traditional accounting controls such as measurement of cost reductions, financial performance and reward systems, but also formal *non-accounting based* controls such as selection and certification of suppliers. Further the terms also describe *informal or social controls* such as trust, power, previous experience and norms.

³ This includes papers published both in major accounting journals and in other relevant literatures.

The literature review is organised as follows. Section 2.2 reviews the functionalist and non-functionalist theoretical frameworks that have underpinned research in the cost management and control of IORs. Then, Section 2.3 summarises the literature according to two broad streams: First, modes of inter-organisational control, i.e. in-complete contracts, open-book accounting, integrated information systems, performance and reward systems, as well as relational concepts such as informal controls and issues of power and trust. Second, modes of inter-organisational cost management (IOCM), which comprise value chain analysis (VCA), total cost of ownership (TCO), target costing, price-quality-functionality trade-offs and minimum cost investigations. Section 2.4 in turn, summarises the achievements recorded so far as regards not only the insights provided by functionalist and non-functionalist theories, but also the overall status of research in modes of inter-organisational control and modes of IOCM. Then, Section 2.5 proceeds with a discussion of opportunities for future research, while Section 2.6 offers some concluding remarks.

2.2. A review of theoretical frameworks

There follows a presentation of the major theoretical frameworks that have underpinned research in the cost management and control of IORs, with the aims of both acknowledging their contributions to the subject and highlighting the differences between the perspectives of the two streams. Differences in perspective are highlighted through referring to the underlying philosophical assumptions of functionalist and non-functionalist research.

2.2.1. Functionalist theoretical frameworks

Functionalist research in the cost management and control of IORs is informed by theoretical frameworks that reflect positivistic philosophical assumptions.

The ontology of positivism views the social world comprising predictable, stable and independent to our perceptions phenomena clearly formed and existing in an orderly and universalistic pattern (Chia, 2002). Any conception of reality is, thus, atemporal meaning that social phenomena are assumed to possess the same properties across time and space. Such ontological assumptions give place to a static epistemology that generates knowledge by focusing on end-states, while ignoring the processual and fluxing nature of the social world (Chia, 2002). Human nature under the positivist tradition is assumed to be “calculative and instrumentally rational, but essentially passive” (Hopper & Powell, 1985, p. 434), meaning that it can be influenced to meet desired ends when appropriate stimuli or controls are in place.

According to Håkansson and Lind (2007), the majority of research in the cost management and control of IORs has been informed by functional frameworks (e.g. Anderson & Dekker, 2005; Anderson *et al.*, 2000; Bogaard & Speklé, 2003; Cooper & Slagmulder, 2004; Dekker, 2003, 2004; Gietzmann, 1996; Kajüter & Kulmala, 2005; Langfield-Smith & Smith, 2003; Mahama, 2006; Meer-Kooistra & Vosselman, 2000; Sartorius & Kirsten, 2005; Seal *et al.*, 1999). Functional theoretical frameworks comprise TCE, agency theory and incomplete contracting as well as strategic management theory, industrial economics, resource-based theory, organisation theory, and contingency theory (Ryan *et al.*, 2002).

Overall, functional research is often influenced by a managerialist perspective, where the cost management and control of IORs aims to achieve purposeful outcomes, i.e. ensure that

organisational objectives are met and that efficiency is attained through aligning certain modes of cost management and control with certain types of transactions. According to Ryan et al. (2002), while functionalist approaches are good at providing generalisable predictions on this alignment, they are very weak at predicting how these relationships emerge in specific settings where deviations or variations may take place.

Each of the functional frameworks is reviewed in the sub-sections below.

2.2.1.1. Transaction Cost Economics

Meer-Kooistra and Vosselman (2006) observed that “extant research into management control in interfirm transactional relationships has substantially been informed by transaction cost economics” (p. 228, e.g. Anderson & Dekker, 2005; Anderson *et al.*, 2000; Birnberg, 1998; Bogaard & Speklé, 2003; Cooper & Slagmulder, 2004; Dekker, 2003, 2004; Ittner *et al.*, 1999; Langfield-Smith & Smith, 2003; Meer-Kooistra & Vosselman, 2000; Sartorius & Kirsten, 2005; Seal *et al.*, 1999; Speklé, 2001).

TCE is central to research in IORs because it is concerned with the make-or-buy decision, i.e. the boundary decision that in turn influences the emergence of IORs (Walker & Weber, 1984). The make-or-buy decision can lead to the establishment of IORs when organisations decide to externalise certain activities, i.e. transact with legally independent organisations, rather than undertake them in-house. TCE explain the make-or-buy decision by asserting that “transaction cost economies are realised by assigning transactions (which differ in their attributes) to governance structures (which are the organizational frameworks within which the integrity of a contractual relation is decided) in a discriminating way” (Williamson, 1985, p. 41).

TCE, therefore, seeks an *efficient* match between transactions and modes of governance that minimise transaction costs (Dekker, 2004; Speklé, 2001; Walker & Weber, 1984; Williamson, 1985).

TCE prescribes that transactions can be assigned to either of three modes of governance, namely: hierarchies, markets and hybrids, whose coordination requirements fall in-between markets and hierarchies (Bartho & Jepsen, 1997; Dekker, 2004; Speklé, 2001). These modes differ in their administrative mechanisms and consequently in respect of costs. At the same time, not all transactions are uniform but are distinct and characterised by certain attributes (Williamson, 1985).

In particular, the choice of the appropriate mode of governance is determined by the characteristics of the specific transaction, assumptions on human nature and the characteristics of the environment, which combined ascertain the cost of the transaction. Three major transaction characteristics are identified in TCE, namely: asset specificity, frequency and uncertainty, while bounded rationality and opportunism are human nature characteristics that ascertain along with uncertainty, small numbers of available vendors and information asymmetry an ‘optimal’ choice of governance structure (Dekker, 2004; Speklé, 2001; Walker & Weber, 1984; Williamson, 1985). That choice, “offers some distinctive set of control devices – a set that cannot be replicated within alternative arrangements – that is uniquely tailored – in a relative sense – to the control needs of that transaction” (Speklé, 2001, p. 420; Walker & Weber, 1984; Williamson, 1985).

In TCE, therefore, the transaction is the basic unit of analysis for it “provides an understanding of observed organisational forms or governance structures for transactions at a

generic level” (Meer-Kooistra & Vosselman, 2006, p. 228), while transaction costs along with production costs play a decisive role in drawing organisational boundaries (Williamson, 1975, 1985). In this respect, Anderson et al. (2000), in line with Williamson (1985), argued that organisations “choose organizational boundaries to minimise the sum of production and transaction costs” (p. 726). TCE, therefore, implicates research in IORs and IOCM and control through specifying the best mode of governance for coordinating transactions. Scope for IOCM and control resides with hybrid organisational arrangements that fall in-between the market-hierarchy ends of the continuum, and which may lean either closer to the hierarchy or the market end (Coad & Cullen, 2006; Cooper & Slagmulder, 2004; Speklé, 2001; Williamson, 1985). In this respect, Dekker (2004) observed that hybrid governance provides coordination mechanisms that trade-off “some of the high powered incentives of the market in favor of superior coordination and some cooperativeness of the hierarchy in favor of superior market incentives” (p. 29).

As mentioned previously, TCE has informed a considerable number of papers in IOCM and control, however, the approach is not without its limitations. Whilst not denying the possibility of other motives than transaction cost minimisation behind organisations’ initiative to engage into some sort of IOR, TCE still assumes this to be the main one (Dekker, 2004). However, for Dekker (2004) concerns about transaction costs and potential opportunism are only a subset of the challenges faced by organisations in IORs because what they primarily seek to ensure is that the relationship involves *value-creating* activities. Another significant limitation of TCE is its weakness to quantify transaction costs and this is because reporting systems rarely measure such costs (Child *et al.*, 2005; Walker & Weber, 1984). Moreover, Anderson et al.

(2000) questioned the transaction cost economising rationale of TCE in that decision-makers do not always behave in a goal-congruent, rational manner and personal or departmental wealth effects as well as cognitive limitations may also influence their decisions.

Further, TCE has limitations regarding the study of management accounting as a *process* of change. This is because it is “more concerned with predicting the rational or ‘optimal’ outcomes, rather than explaining the unfolding processes in moving from one equilibrium state to another” (Burns & Scapens, 2000, p. 4; Child *et al.*, 2005). Finally, Coad and Cullen (2006) argued that “complex interrelationships between information needs, trust and control systems [...] are not captured by transaction cost theories” (p. 343) making it meaningful “to apply different theoretical perspectives to the study of IORs, as it is unlikely that a single theoretical perspective can provide a thorough understanding of the complexities of this phenomenon” (Anderson *et al.*, 2000, p. 29). In what follows, a discussion is offered on the insights of agency theory and incomplete contracting for IOCM and control.

2.2.1.2. Agency Theory and Incomplete Contracting

Kraus and Lind (2007) argued that agency theory is the second most popular theory for studying management control configurations such as incentive systems to curb opportunism and information asymmetry in IORs.

For Eisenhardt (1989), “the heart of agency theory is the goal conflict inherent when individuals with differing preferences engage in cooperative effort” (p. 63), while Samaddar et al. (2006) observed that the “theory has been applied to relationships that involve parties external to the organization and is thus relevant to inter-organizational relationships” (p. 14; see also Child *et*

al., 2005; Speklé, 2001). Agency theory informed studies of IOCM and control through highlighting the importance of incentives and self-interest, which can both have significant implications for the success of cooperative efforts between organisations.

Agency theory is concerned with regulating a relationship of interdependence between two contracting parties, the principal and the agent. The principal, e.g. an outsourcing organisation, delegates the agent, e.g. a supplier, to produce a product or service on their behalf as the former is unable or unwilling to do so due to e.g. lack of resources, expertise to undertake the project or lack of access to local markets (Child *et al.*, 2005; Gray & Stuart, 2005). At this point, two problems may arise, namely: the agency and the risk-sharing problem (Eisenhardt, 1989; Trienekens & Beulens, 2001). The agency problem arises when diverse principal-agent interests encourage opportunistic behaviour from the agent against the principal who is usually unable, due to e.g. information asymmetry and bounded rationality, to control the agent's actions. Risk sharing, in turn, refers to situations where principal and agent have different perceptions of risk, thus hindering investments in relationship-specific assets (Trienekens & Beulens, 2001). Agency theory, therefore, is centrally concerned with specifying an efficient contract that limits agents' self-serving behaviour (Child *et al.*, 2005; Eisenhardt, 1989; Jensen & Meckling, 1976).

The implications of agency theory for the study of IOCM and control are that the parties should establish a set of incentive and monitoring mechanisms to ensure information sharing, goal congruent behaviour, and that there is a communicated and accepted basis for sharing the benefits from the relationship (Baiman & Rajan, 2002a; Child *et al.*, 2005; Dekker, 2003; Seal *et al.*, 1999). With regards to the nature of management controls, Eisenhardt (1989) argued that outcome-based contracts and behaviour-based contracts can be combined to coordinate a

relationship where incentive mechanisms can emerge from a mixture of behaviour and outcome-based controls. Further, Banberg and Spremann (1987) argued that agency theory also relates to incomplete or relational contracts.

The theory of incomplete contracting relates to agency theory and TCE and has informed the study of the cost management and control of IORs (Donada & Nogatchewsky, 2006; Gietzmann, 1996; Williamson, 1985). However, the theory also differentiates from TCE in that it employs such relational safeguards as trust, commitment, bonding, values, norms and reputation to govern IORs, which TCE ignores (Barney & Hansen, 1994; Bartho & Jepsen, 1997; Child *et al.*, 2005; Zaheer & Venkatraman, 1995). Incomplete contracting contends that while complete contracts would be ideal for the coordination of hybrid relationships, this is almost invariably impossible because complete contracting assumes “certainty regarding the future economic environment or unbounded rational reasoning” (Anderson *et al.*, 2000, p. 726). However, bounded rationality and uncertainty deem complete contracting impossible or costly to implement giving rise to contractual incompleteness, which generates transaction costs. According to Gietzmann (1996), transaction costs arising from e.g. low quality and opportunism can be managed through the employment of hybrid governance and a set of formal and informal controls such as rank-based rewards and trust.

While agency theory has contributed to research in IOCM and control, its contribution is seen as fragmented, partial and unable to “capture control in its entirety” (Speklé, 2001, p. 420). Tomkins (2001) argued that agency theory is of limited relevance to coordinating IORs because it assumes a master and agent relationship where incentives for congruent performance can be clearly tied with specific rewards, and because a fair share of the gains is not an issue as the

principal has the power to determine the terms of a complete contract. Such conditions, however, for Tomkins rarely apply in IORs.

According to Håkansson and Lind (2007) and Kraus and Lind (2007), TCE, agency theory and incomplete contracting have predominantly informed research of IOCM and control. Nevertheless, the discussion proceeds to examine the insights offered by strategic management theory, industrial economics and resource-based theories.

2.2.1.3. Strategic Management theory, Industrial Economics and Resource -based theories

Strategic management theory (SMT), Porter's (1980, 1985) industrial economics and resource-based theories emphasise the decisions an organisation takes to determine its position in the market.

SMT examines the motives for forming cooperative relationships, the selection of potential partners and the need for a strategic and cultural fit thereto (Child *et al.*, 2005). At the same time, Porter's positioning perspective is concerned with how an organisation can achieve competitive success by seeking stronger positions within its industry (Porter, 1985), while resource-based theories examine how an organisation can achieve sustainable competitive advantage through obtaining and maintaining strategic resources and capabilities. These theories implicate a role for management controls, accounting and non-accounting based, to inform organisations' decisions to develop and sustain competitive advantage.

On the implications of SMT in cooperative long-term relationships, Child *et al.* observed that "the very consideration of cooperative forms is driven by strategic motives" (2005, p. 75)

that can be external and internal to the organisation. External motives to the establishment of cooperative IORs include the rapid technological development compounded with the decreasing life cycle of products and the rising complexity of input and output markets (Gietzmann, 1996; Mouritsen *et al.*, 2001; Nooteboom, 1997). Internal motives on the other hand, involve efforts of organisations to better manage both their production and their transaction costs to meet a descending price rate, and thus to sustain their competitiveness or enhance their contribution of value to society (Child *et al.*, 2005; Kulmala *et al.*, 2002). Other reasons include sharing of financial risk, getting access to new markets, complementary capabilities and resources.

With regards to IOCM and control, SMT and Porter's positioning perspective have strategic implications for management accounting in that the latter should account for changes not only in the internal but also in the external environment of organisations (Drury, 2004; Horngren *et al.*, 2005). In this respect, Porter (1985) developed the concept of the 'value chain' to articulate the external perspective that organisations should embrace when formulating their cost advantage and/or differentiation strategy. Shank and Govindarajan (1992) extended Porter's work to argue that the value chain concept can be used to advance a strategic perspective in managerial cost analysis. They argued that traditional management accounting adopts an 'added-value' perspective that starts too late by recording the purchases from suppliers and stops too soon with the sales to customers. To them, an 'added-value' perspective ignores the opportunities for cost analyses to take advantage of linkages upstream and downstream the value chain. Similarly, Horngren et al. (2005) observed that in contrast with the internal focus of traditional management accounting, strategic management accounting (SMA) seeks to integrate "financial and non-financial information, competitor activities, product characteristics, market-share data and other value-chain-related information" (p. 791). At the same time, Coad and Scapens (2006; , 2007)

argued that SMA techniques such as target costing, activities-based costing (ABC), value-chain analysis (VCA), business process re-engineering (BPR) and just-in-time (JIT) can act as heuristics of IOCM.

Resource (inter)-dependencies also influence control decisions in IORs because they recognise the need of partners not only to avoid misappropriation of invested resources but also to handle interdependences through coordination of inter-organisational activities (Child *et al.*, 2005; Dekker, 2004, 2008). In this respect, resource-based theories view the organisation as a bundle of resources that achieves sustainable competitive advantage when it can secure strategic resources “that meet the conditions of being valuable, rare, inimitable and nonsubstitutable” (Child *et al.*, 2005, p. 24; Peteraf, 1993). The contribution of resource-based theories in IOCM and control is that they account for interdependencies that arise when organisations cooperate to obtain resources and capabilities that they are either unable or are costly to create internally, due to e.g. resource scarcity and lack of knowledge or because they are inimitable, based on tacit knowledge embedded in other organisations (Child *et al.*, 2005). Organisations, thus, under a resource-based view, concentrate on their core competencies and form outsourcing, supply partnerships and other IORs to acquire resources they cannot obtain or create internally at low cost (Child *et al.*, 2005; Cooper & Slagmulder, 2004; Dekker, 2003, 2004, 2008; Meer-Kooistra & Vosselman, 2000).

Further insights into the diversity of IOCM and control practices have been provided by organisation theory and contingency theory, which are considered in the next sub-section.

2.2.1.4. Organisation theory and Contingency theory

Functionalist research in IOCM and control has also been informed by organisation theory (e.g. Dekker, 2004; Langfield-Smith & Smith, 2003; Meer-Kooistra & Vosselman, 2000; Sartorius & Kirsten, 2005; Seal *et al.*, 1999; Speklé, 2001).

This body of theory provides insights regarding the observed diversity in governance structures and controls, which are not provided by TCE (Dekker, 2004). According to Child *et al.* (2005), organisation theory addresses control issues that arise from resource dependency and issues of learning and trust. To them, “organizing alliances so as to reconcile their needs for learning and control is one of the most important requirements for a truly cooperative strategy to be implemented successfully” (p. 46). The issues of control in IORs highlighted by organisation theory emphasise that while formal controls are necessary, they should be supplemented with informal controls such as open communication that can act as a basis for building trust, bonding and learning. Informal information sharing can also be supportive of formal controls to become more flexible and responsive to changes in the institutional environment (Coad & Cullen, 2006). Moreover, resource dependency stimulates the rationalisation of control in cooperative relationships to not only secure benefits from and avoid misappropriation of invested resources, but also to coordinate interdependent inter-organisational activities (Child *et al.*, 2005; Dekker, 2004). The need for coordinating tasks, and in fact the underlying interdependences that concern organisation theory, arise out of the motives of firms to create value from processing scarce and asymmetrically distributed resources (Dekker, 2003, 2004).

Thompson (1967) refers to the management of interdependence as a main concern of organisation theory and provides a typology of three levels of interdependence, namely: pooled,

sequential and reciprocal. Pooled interdependence refers to the need for the parties to perform tasks for the survival and good performance of the IOR. No direct interdependence exists between the parties, however, failure of any one of them to perform adequately, threatens the relationship. Sequential interdependence refers to relationships where resources are transferred in a 'serial' manner from one party to another, e.g. buyer-supplier ones. Such relationships also include a pooled aspect of interdependence. Finally, reciprocal interdependence refers to a relationship where the outputs of one party become inputs for the others. Pooled and sequential aspects of interdependence also exist in such relationships, implying a higher degree of complexity and uncertainty in their coordination. In summary, Thompson argues that the coordination structures and corresponding coordination mechanisms within and among organisations are positively related with the uncertainty, complexity and interdependence of tasks.

Another theory which influenced research in IORs and their cost management and control is contingency theory. Contingency theory has its roots in organisation theory (Hopper & Powell, 1985; Ryan *et al.*, 2002) and contends that there is no such thing as a governance structure and control system suitable to all organisations. It calls, thus, for alignment of governance with specific organisation and environmental characteristics (Drury, 2004). For example, Hergert and Morris (1989) suggested at this point that different accounting information should be designed to meet different purposes. Similarly, Kajüter and Kulmala (2005) applied contingency theory to explore variety in management controls and explain how control system choices interrelate with wider factors extending beyond the boundaries of the IOR.

Contingency theory, however, has its limitations. Hopper and Powell (1985) argued that the theory lacks ability to define and measure contingent factors and that it focuses on elements of control systems rather than on their entirety. In this respect, Speklé (2001) argued that TCE provides a more comprehensive theoretical framework than contingency and agency theory.

2.2.2. Non-functionalist theoretical frameworks

The theoretical frameworks presented previously are part of the functionalist or positivist stream of research in IOCM and control. These frameworks do not account for subjectivity and complex interrelationships among, for example, management controls, action, the institutional environment and conflicting goals that can generate intended and at times unintended consequences in the coordination of IORs. Instead, their focus is on predicting general patterns of control mechanisms against general characteristics of the transaction, the environment and the parties (Ryan *et al.*, 2002).

The theoretical frameworks falling into the non-functionalist group of research are ST, ANT and the Industrial-Network approach, which employ philosophical assumptions that differ from the functionalist group (Håkansson & Lind, 2007). The philosophical assumptions underpinning such frameworks reflect the theoretical traditions of interpretivism, critical theories, and postmodernism. In this respect, Håkansson and Lind (2007) argued that non-functionalist studies are heterogeneous for they are informed by theoretical frameworks that rely on different or varying sets of philosophical assumptions. These philosophical assumptions, however, broadly share the ontological position that ‘reality’ can be understood through examining the processes that give it a specific shape within specific contexts, times and spaces. Non-functionalist studies

accept that ‘reality’ is socially constructed and examine the dynamics that place cost management and control into a web of recursive interactions where the end results are temporal, fluid, at times unintended and pertinent to the specific conditions characterising the research environment (Baxter & Chua, 2003; Chia, 2002; Ryan *et al.*, 2002). In this respect, Caglio and Ditillo argued that “[t]he more a research method permits the overall and simultaneous investigation of such complex nexus of relationships, the more the view of cost and accounting-based mechanisms and roles in interfirm relationships could become comprehensive, varied and uniquely specified” (2008, p. 887).

Moreover, Håkansson and Lind (2007) suggested that relatively little research has been employed so far to investigate IOCM and control from a non-functional theoretical perspective. In particular, Mouritsen *et al.* (2001), Mouritsen and Thrane (2006), Cuganesan and Lee (2006) and Chua and Mahama (2007) drew on ANT; Berry (1994), Tomkins (2001) and Håkansson and Lind (2004) drew on the Industrial Network approach; Sydow and Windeler (1998), Seal *et al.* (2004) and Free (2008) employed ST, and Coad and Cullen (2006) formulated an evolutionary framework acknowledging the contribution of ST in their work. Finally, Thrane (2007) adopted a systems approach that is disentangled from the functionalist assumptions of cybernetic control.

In the parts that follow a presentation of the insights offered by each of the aforementioned non-functionalist theories is provided.

2.2.2.1. Actor Network Theory

The sociology of translations, or else ANT, is based on the works of Callon (1986a; , 1986b) and Latour (1987). It is an ‘alternative’ approach, which investigates the processes through which humans and non-humans, e.g. technological objects, interrelate to constitute heterogeneous networks that make up society (Baxter & Chua, 2003; Chua & Mahama, 2007). These interrelationships take place within networks or ‘action-nets’ of human and non-human actors that “achieve their form as a consequence of the relations in which they are located” (Law, 1999, p. 4). The identity of the network, therefore, is influenced by its members who interact to produce certain outcomes that may change its constitution as new allies are brought-in and others leave.

Relationality, therefore, is a fundamental characteristic of ANT, which suggests that both human and non-human actors such as accounting controls and other technologies do not possess innate attributes, but instead these are performed, “are relational achievements, that is uncertain effects generated by an actor-network and its mode of interaction” (Doolin & Lowe, 2002, p. 72). Chua and Mahama (2007) observed that relationality introduces action at the heart of ANT but in a way that it is not a function of the actor per se. Instead the capacity to act is dependent on the “dispersed network of co-actors, connections, and inter-dependencies” (ibid, p. 52). A consequence of the relationality of actors, however, is their performativity in actor-networks. Performativity refers to the purposive role of agents while enacting relations of phenomena and their potential change through employing other human or non-human entities to support rhetoric based on inscriptions and meanings (Cuganesan & Lee, 2006; Lowe, 2004; Mouritsen *et al.*, 2001). Finally, heterogeneity refers to the fact that any network is constituted by unique sets of resources, implying that each organisation or network of organisations possesses certain

characteristics e.g. institutionalised practices, core competencies as well as learning patterns and change propensities (Coad & Cullen, 2006; Mouritsen *et al.*, 2001).

In summary, ANT embraces relativist ontology because it stresses that relationships of phenomena can only be understood when examining the context-specific, relational, processes through which they unfold (Lee & Hassard, 1999). For ANT, no universal prescriptions are feasible, which suggests that if understanding of IORs and their cost management and control is to be achieved, it is necessary for researchers to examine them within the context in which they are embedded (Chua & Mahama, 2007). Accounting under ANT is viewed as a technology that is not passive, but instead is capable of influencing behaviour and meanings in networks (Cuganesan & Lee, 2006; Lowe, 2004; Mouritsen *et al.*, 2001). It is viewed as a source of ambiguity and conflict as much as a source of cooperation, cost information exchange and trust (Chua & Mahama, 2007). Moreover, the theory's reliance on processes of translation to form networks suggests that accounting numbers do not necessarily reflect the economic substance of transactions but instead "the interests of disparate groups of organisational participants who work incessantly to maintain the "position" of (their) numbers and influence over organisational functioning" (Baxter & Chua, 2003, p. 102, parenthesis in original).

ANT, however, while acknowledged by its proponents to be "a heterogeneous work in progress" (Law, 1999, p. 9) has received criticisms that touch on its philosophical assumptions. Doolin and Lowe (2002) argued that ANT's relativist ontology is responsible for the theory attracting criticisms, "including an inadequate consideration of social structures, the symmetric treatment of humans and non-humans and moral relativism" (p. 73). Further, Whittle and Spicer (2008) argued that ANT's flat and relativist ontology cannot provide a critical approach to

organisation research, because it is unable to “develop and account of how the capacities of actors are emergent and interpretively flexible, how the split between human and non-humans is created in social practice and how actors escape the process of translation” (p. 617).

Criticisms on ANT’s symmetrical treatment of humans with non-humans also suggest that it degrades the role of political action to construct, challenge and reconstruct hierarchies in networks, internal cores and peripheries, and thus, acknowledge unequal power relations among network members, particularly human and non-human (Doolin & Lowe, 2002; Leitner & Miller, 2007; Miettinen, 1999; Whittle & Spicer, 2008).

2.2.2.2. Industrial Network approach

The Industrial Network approach is another network theory, which has not been much employed and debated in the literature of IOCM and control but whose contribution, however, has been advocated and documented by Kraus and Lind (2007) and Håkansson and Lind (2007). According to both literature reviews, the difference of the approach to ANT is that the former places more attention on the interdependencies and embeddedness of organisations in networks for explaining the nature of cost and other management controls and their active role in reshaping network relationships. The Industrial Network approach does not assume that actors behave opportunistically, whereas ANT emphasises the symbolic capacity of accounting controls to translate interests, sustain ambiguity and conflict in networks.

Overall, for Håkansson and Lind (2007) the approach confers accounting controls a learning role for IORs, which are viewed as embedded in a web of relationships that is dynamic and changing (see also Kraus & Lind, 2007). The concept of embeddedness highlights the role of

accounting controls in providing feedback on the effects that changes of a network member's dyadic relationship have on the whole network (Berry, 1994; Kraus & Lind, 2007). Related to the above, the approach highlights a role for accounting controls to provide network members with information on the governance arrangements they need to pursue for their relationships given the importance of the resources exchanged. As Kraus and Lind (2007) suggested in this respect, "different forms of management control are suitable within different inter-organisational relationships" (p. 291).

In summary, the Industrial Network approach and ANT emphasise a dynamic role for management accounting, not only within the boundaries of a certain IOR but also across a wider network of IORs. Whilst both approaches present processual perspectives to study the cost management and control in IORs, ST offers another such approach that is outlined in the following part, and which as it will be argued in Chapter 3, will be employed to theoretically inform this research.

2.2.2.3. Structuration Theory

Anthony Giddens has contributed significantly to the development of ST which, however, has been criticised and refined (e.g. Parker, 2006; Stones, 2005). ST offers the ontological potential of reconciling opposing strands in traditional sociology, namely: structure and agency, "without giving an *a priori* primacy to one or the other" (Stones, 2005, emphasis in original, p. 4). It emphasises a recursive relationship between the two so that it is difficult to treat them separately (Boland, 1993; Giddens, 1984; Macintosh, 1994; Scapens & Macintosh, 1996). Hence, ST "incorporates and subsumes both the objective-subjective and the evolutionary-radical change

positions” (Macintosh, 1994, p. 169), meaning that it cannot be classified, for example, to any one of the four paradigms identified by Burrell and Morgan (1979)⁴ (see also Child, 1997; Pozzebon, 2004).

In particular, Giddens (1984) conceptualised the linkage between structuralism and agency by establishing a fundamental concept, namely the ‘duality of structure’, which embodies the recursive relationship between agency and structure and suggests that in order to understand the social world it is necessary to examine social systems in interaction. ST, therefore, provides a dynamic and processual approach that allows examination of how social systems sustain the status quo while at times effect change, path-dependent or radical (Boland, 1993; Macintosh, 1994). Giddens (1984) employed the duality of structure to argue that structures, which he conceptualised as rules and resources, enable and constrain action only when instantiated in specific time and space settings. Structures, while existing independently of any individual agent, are embedded as stocks of knowledge in agents’ mindsets (Macintosh, 1994). Agents at the same time are perceived as existential beings, meaning that they are not merely pushed around by structures but that, if they choose to, can act differently and change the structural context (Layder, 2006; Macintosh, 1994; Macintosh & Scapens, 1990). As such, structure is both the medium and the outcome of agency; agents have structures within them and structures are the socially constructed products of agents (Boland, 1993; Stones, 2005). Consequently, the duality of structure is pivotal to the conceptual standing of ST.

⁴ Burrell and Morgan’s (1979) seminal contribution classified theoretical approaches of management accounting research into four mutually exclusive paradigms, i.e. functionalist, interpretivist, radical humanist and radical structuralist on the basis of two dimensions, namely: objective versus subjective and regulation versus change. Their framework spurred academic debate (Chua, 1986; Hopper & Powell, 1985; Humphrey & Scapens, 1996; Laughlin, 1995; Morgan, 1988; Willmott, 1993) on the incommensurability of paradigms and on the need for accounting researchers to revisit and acknowledge the methodological underpinnings of their research.

Under ST, agents intentionally participate in social interaction and can provide reasons, if asked, for their choices. However, according to Giddens, agents find it impossible to always make conscious choices and think analytically about every event affecting their social lives. For reasons of convenience they reflexively monitor theirs and others actions by resorting to two levels of consciousness, namely: discursive and practical (Giddens, 1984; Macintosh, 1994). While at the discursive level agents can verbally provide reasons for their actions, they usually routinely and automatically monitor their actions at the practical level of consciousness by relying on implicit stocks of knowledge (Giddens, 1984; Layder, 2006; Macintosh, 1994; Macintosh & Scapens, 1990). Acknowledgement, however, of agents' routinely engaging in social interaction by resorting to the practical level of their consciousness provides scope for unacknowledged conditions of action and, therefore, unintended consequences, which may give place to radical and indeterminate change (Macintosh & Scapens, 1990; Stones, 2005).

Both levels of consciousness through which agents draw from their knowledge of the situation to reproduce or alter structural properties are influenced by agents' need for ontological security, which is lodged in the unconscious. The need for ontological security offers an important insight to ST for it describes the development of mechanisms during an agent's early life that help to curb anxiety and uncertainty. In this respect, the development of system trust (Luhman, 1979), i.e. the belief in the continuity and consistency of social relations and systems, underpins ontological security and largely explains "why agents routinely reproduce social systems, even those they might readily recognise as excessively coercive" (Macintosh, 1994, p. 171).

Moreover, “[a]nother major gain from structuration theory is that issues of power and morality become highly explicit” (Macintosh, 1994, p. 170). In this respect, Giddens (1984) argued that social systems exhibit structural properties that can be analytically distinguished in three dimensions, namely: signification, legitimation and domination. Agents, when engaging in social interaction, draw from these structural properties interpretive schemes, norms and resources, which they employ to inform their action in terms of communication and meanings, sanctions and rewards, and the exercise of power. Particularly structures of domination are prime to economic systems and are drawn on by resort to allocative and authoritative resources (Sydow & Windeler, 1997). Allocative resources refer to the right of agents to command material objects, while authoritative resources refer to the rights of some agents to command others.

Further, a concept central to ST and to its acknowledgement of relations of domination and dependence, is the ‘dialectic of control’. This concept signals that relations of domination and dependence are never totally in favour of the dominant party because no matter how few resources the dependent party possess, the dominant party is never completely independent of the weaker party. It should be noticed here that the ‘dialectic of control’ is connected to notions of contradiction that are inherent to any social system. This is because social systems inevitably comprise structural principles that while they presuppose one another they also negate each other (Giddens, 1984; Macintosh, 1994). The ‘dialectic of control’ reflects these structural contradictions and seeks to establish some sort of mutual binding between conflicting agents or aggregates of agents that form social systems.

In summary, ST’s duality of structure and the distinction of structures of signification, legitimation and domination offer valuable insights to the cost management and control of IORs.

This is because ST directs research to illuminate alternative roles for management accounting than the ones prescribed by functionalist research, which view management accounting as merely a tool useful for decision-making. According to Macintosh (1994), “[m]anagement accounting and control systems are deeply implicated in relations of domination” (p. 175). This statement is even more important for IOCM and control because it is exercised across organisations with separate legal boundaries where trust and power relations have to be managed in the absence of hierarchical fiat. Moreover, ST offers the potential to highlight how IOCM and control practices reproduce or change structures through their enactment in interaction among often overlapping social systems with different interests and agendas. It can potentially offer insights into how structures of legitimation, for example, are implicated in shaping and reshaping a language of what counts as acceptable performance (Sydow & Windeler, 1997, 1998).

The literature review has so far examined the functionalist and non-functionalist theoretical frameworks that have underpinned research into IOCM and control, suggesting that the majority of research on the subject has drawn from functionalist theoretical frameworks. The following Section goes on to explore the specific modes of IOCM and control that have been identified in the literature to date.

2.3. Modes of IOCM and control

This Section first reviews the literature that examined modes of inter-organisational control and then the literature that examined modes of IOCM.

2.3.1. Modes of inter-organisational control

Modes of inter-organisational control contribute to the overall management of IORs. They set the rules for coordinating the relationship, embody expectations and commitments, and provide the means for reaching agreements on resource allocations and profit sharing patterns.

Modes of inter-organisational control can be distinguished in more or less complete contracts, open-book accounting, integrated information systems and performance measurement and reward systems. Further, relational concepts and informal controls such as bonds of friendship, previous experience with the partner and issues of power and trust are important means of inter-organisational control that can support or hamper the effectiveness of formal controls, while at other times may even substitute such controls.

There follows a classification of research according to its focus on modes of inter-organisational control.

2.3.1.1. (Incomplete) contracts

Contractual agreements are a major constituent of governance in IORs and regardless of how incomplete they are, they may comprise provisions for risk-return patterns, mutual investment projects, exchange of cost and quality information, safeguards to protect against opportunistic behaviour, and the circumstances under which the relationship can be terminated (Seal *et al.*,

1999). Incomplete contracts are presented among the modes of inter-organisational control because they act as a broader governing frame for establishing and implementing IORs, while they may also comprise provisions for specific techniques of IOCM. Examples of studies documenting incomplete contracts are Gietzmann (1996), Baiman and Rajan (2002a), and Anderson and Dekker (2005).

Baiman and Rajan (2002a) argued that the main buyer-supplier incentive issues referring to information exchange and the risk of opportunistic behaviour arising from asset specific investments and hold-up “are better captured within incomplete contracting models” (p. 214). Gietzmann (1996) at the same time, showed that complete contracts are not possible for IORs because of bounded rationality and uncertainty. According to Gietzmann, incomplete contracts should be supplemented by trust and commitment, while the management accountants should “remove short-term financial results orientated type controls and instead replace them with longer term innovation promoting type controls of a dualistic nature” (p. 623). In this way, he argued that incomplete contracts safeguard the parties from opportunistic behaviour because dualistic, i.e. cooperative, accounting controls self-restrain partners and provide the grounds for encouraging innovation via, e.g. controlling which partners need further assistance to improve and which ones deserve more profitable orders.

In another study, Anderson and Dekker (2005) suggested that although contracts are inherently incomplete there is strong evidence of a relationship between transaction characteristics implicating appropriation concerns such as the size of the transaction, asset specificity and transaction complexity, and the extensiveness of contracts. The authors identified four patterns in the use of specific contract terms, which they conceptualised as dimensions of

inter-organisational management controls, namely: assignment of rights, product and price terms, after-sales service terms, and terms of legal recourse.

Analysis of the relationship between the four contractual patterns revealed that these were positively associated with the nature of the control problem as determined by supplier and transaction characteristics. That is, the higher the transaction hazards involved, the higher was contract extensiveness in terms of the above patterns and the higher were the contract drafting costs. Moreover, the authors argued that it is the manner through which transaction and supplier characteristics are associated with contract extensiveness and management controls that determines whether performance problems in the implementation of the IOR are anticipated or not.

Apart from contracts, assurance between organisations in IORs can be established through the practice of open-book accounting, which is discussed below.

2.3.1.2. Open-book accounting

Open-book accounting assumes that increased transparency and extensive information flows between organisations in IORs provide scope for learning of each party's activities and, therefore, enable development and reconfiguration of their operations to achieve mutual benefits (Kraus & Lind, 2007). This technique simply involves that one or both of the parties in an IOR 'open their books' to disclose detailed cost data to their counterpart(s) (Håkansson & Lind, 2007; Kraus & Lind, 2007).

Kraus and Lind (2007) and Håkansson and Lind (2007) reported that the technique is often used in a one-sided manner as evidenced from the studies of e.g. Carr and Ng (1995),

Dekker (2003), Mouritsen et al. (2001) and Munday (1992). This takes place when a strong customer requires its suppliers to open their books and give access to financial and non-financial information, allowing the customer to become actively involved in its suppliers' operations (Kraus & Lind, 2007). For example, Mouritsen et al. (2001) showed that the customer only delivered sales forecasts to its suppliers, whereas the suppliers disclosed cost and operational information to the customer.

As regards the applicability and diffusion of the technique, Kajüter and Kulmala (2005) investigated the reasons behind open-book accounting succeeding in some cases while failing in others. They concluded that "open-book accounting will only be successful in particular circumstances" (Kajüter & Kulmala, 2005, p. 197; see also Cooper & Slagmulder, 2004) and identified endogenous, exogenous and network-specific factors likely to encourage its diffusion. Exogenous factors likely to encourage its successful adoption included intense competition and consequent pressures for cost reductions as well as industries characterised by high growth. Endogenous factors involved large organisation size, use of advanced accounting systems, long-term commitment to supply chain relationships, while network-specific factors comprised mutual trust, the type of product, the type of network and the existence of an infrastructure for exercising open-book accounting.

In another study, Carr and Ng (1995) showed how a Nissan factory in the UK practised one way open-book accounting, while some of its suppliers were getting access to cost information about direct costs and overheads, as well as to operational information. Particularly, Nissan's supplier development team used open-book accounting information to assist "suppliers in improving their overall performance in respect to quality, productivity and efficiency" (Carr &

Ng, 1995, p. 375). Other benefits suppliers experienced from entering to an open-book agreement were the disclosure from Nissan of its production schedule making, thus, possible a reduction of their lead times and handling costs. The benefits for Nissan, in turn, translated in just-in-time delivery of components with a corresponding reduction of delays and handling costs.

Moreover, Seal et al. (1999) and Kulmala et al. (2002) reported on the role of open-book accounting to promote mutual cost awareness and enable target costing, shared cost reduction activities and investment projects (see also Axelsson *et al.*, 2002). Kajüter and Kulmala's (2005) case also showed that open-book accounting was necessitated because target costing, and the cost reduction techniques deployed to meet the agreed target prices, required network members to have an understanding of each other's cost structures. In this respect, Dekker (2003) also supported the assertions of Seal et al. (1999) and Kulmala et al. (2002) on the role of open-book accounting to enhance mutual cost awareness by arguing that it is an important prerequisite for value-chain analysis (VCA).

Kulmala et al. (2002) argued that a prime condition for mutual cost awareness through open-book accounting is not a trusting relationship between the parties, but that the parties can rely on the quality of the cost information they exchange through "creating widely accepted accounting practices between partners" (p. 38; see also Carr & Ng, 1995; Kajüter & Kulmala, 2005). Furthermore, Mouritsen et al. (2001) showed how open-book accounting was exercised following the decision of the case organisation to implement a 'lean thinking' approach through outsourcing. Outsourcing created distance and a gap of control, which the organisations tried to bridge by employing open-book accounting that had not only intended effects such as increasing

efficiency and transparency inter-organisationally, but also unintended consequences on the organisations' intra-organisational structures, i.e. their technology, organisation and strategy.

Nevertheless, confidence among the parties in sharing intimate information remains an important prerequisite for open-book accounting. In this respect, Kraus and Lind (2007) observed that “the system of open-book accounting can be self-regulating, as a customer that misuses such transparency will have problems establishing new open-book accounting arrangements with other suppliers” (p. 277; see also Håkansson & Lind, 2007). For example, Carr and Ng (1995) showed that open-book accounting became possible because Nissan used cost data to suggest ways of cutting the costs of suppliers but not their profit margins. Further, costs were not disclosed to other suppliers (see also Gietzmann, 1996). Similarly, Seal et al. (1999) suggested that open-book accounting can be achieved either through trust or coercion, but because to them trust and cooperation in IORs are preferable to coercion, they argued that open-book accounting can be attained when the parties agree that it will be used for a fair share of the returns (see also Axelsson *et al.*, 2002). Contrary to the above studies, however, Free (2008) and Johnsen and Ford (2005) showed that the way open-book accounting was used in their case, substantially differed from the literature-prescribed aims of it providing a forum for learning and dialogue. Free, for example, showed how the technique was used to force rival suppliers to grant more favourable bids.

There follows discussion of studies that highlighted an enabling role for performance measurement and reward systems to the management control of IORs. These studies considered the conditions influencing the establishment of these systems in IORs as well as how they operate and contribute within the context of IORs.

2.3.1.3. Performance measurement, incentives and rewards

Gietzmann (1996) argued that when an organisation engages in IORs it should apply management accounting controls that are different from those applied when it transacts at arm's-length where the aim is to squeeze the bargaining power and profit margins of suppliers through for example their random rotation and competitive bidding mechanisms.

He argued that management accounting in IORs should incorporate incentive mechanisms and be based on mutuality because, as Seal et al. (1999) observed, in "inter-company agreements there is no single owner of the management accounting systems, there is no central authority to lay down accounting rules" (p. 320). For the management control of IORs Gietzmann (1996) suggested that mutually specified risk-return patterns and rank-based rewards can enhance trust, cooperation and interdependence between organisations. Rank-based rewards and specified risk-return patterns were shown by Gietzmann as ways for the customer organisation to motivate suppliers, achieve cost savings and improve quality.

His case study showed that suppliers who ranked towards the top of the rank-based scale were considered excellent and, therefore, the Japanese assembler engaged in close, long-term relationships with them, whereas suppliers who ranked at the middle of the scale were employed as buffers to meet capacity requirements. On the other hand, IORs with suppliers who ranked towards the bottom were expected to terminate soon unless the supplier made considerable improvements. Overall, the rank-based system was employed as a means of both assigning more profitable orders to those suppliers that achieved higher performance and establishing a reputation for encouraging innovation and attributing any resulting benefits to the parties.

In another study, Dekker (2004) found that outcome controls were linked with financial reward systems in the buyer-supplier alliance he examined, while Håkansson and Lind (2004) showed how the coordination of the IOR relied on budgets, reward schemes and profit measures. Responsibility accounting was implemented in a form of overlapping accountabilities so that Ericsson evaluated and rewarded each unit responsible for relationships with Telia and other customers with reference to how successful its managers had been in persuading customers to take actions of benefit to Ericsson.

Moreover, Mouritsen and Thrane (2006) found that self-regulating mechanisms coordinated multiple IORs in the network they studied through stabilising the flow of interactions by making the calculation and distribution of financial gains more predictable. Such mechanisms comprised “phenomena such as transfer prices, taxes and fees that distribute the financial effects of cooperation according to rules that have been decided well in advance” (p. 267). On the contrary, the authors reported that orchestration mechanisms were also employed and were concerned with giving the network a common objective and identity through, e.g. a network strategy, fairs and meetings. Such controls were seen to focus on more strategic issues such as how network complementarities could be created and what the contribution of each member to the network should be.

Mahama (2006) examined the relationship between performance measurement systems (PMS) and cooperation in the context of strategic supply relationships. He observed that the effort to maintain a cooperative atmosphere in IORs suggests an important role for management controls, not least that of influencing IOR performance. His findings suggested that PMS contribute to not only trigger cooperation in terms of information sharing and problem solving,

but also influence performance in IORs. Overall, Mahama highlighted the significance of information sharing to act as a mediating factor between PMS and cooperation on the one hand, and cooperation and performance on the other.

In another study, Baiman and Rajan (2002a) examined under what circumstances organisations opt to provide incentives and bind their counterpart to cooperate minimising, therefore, transaction costs including opportunistic hazards. While they argued that the introduction of management controls increase the level of information sharing between the parties, they conditioned that the choice of accounting information to be shared is “but one of many inter-firm design choices which affect the efficiency of the supply chain” (ibid, p. 231). In this respect, Baiman and Rajan concluded that incentives on the nature of accounting information to be shared must also consider such IOR-organising variables as: the distribution of asset ownership, the product architecture, the supply chain architecture, the types of investments required by suppliers, the use of common versus exclusive dealerships and the extent to which the members of the supply chain can renegotiate contracts.

There follows discussion of studies, which revealed how integrated information systems facilitated by IT contribute to inter-organisational control among a network of organisations. Further, these studies considered the factors encouraging their adoption as well as intended and unintended consequences.

2.3.1.4. Integrated Information Systems

Integrated information systems refer to enterprise resource planning (ERP) systems that operate across organisational boundaries and facilitate communication and monitoring between

organisations in terms of managing activities and inter-organisational costs (Cuganesan & Lee, 2006; Frances & Garnsey, 1996; Kulp, 2002).

For example, Frances and Garnsey (1996) demonstrated that IT was critical in integrating UK supermarkets with their suppliers. They showed how the supermarkets practised centralised governance (Samaddar, 2006) and used new IT to introduce control mechanisms that consolidated information coordination and preserved their hegemony in the network. The authors showed that electronic point-of-sale scanners in the supermarkets communicated information through electronic data interchange (EDI) straight into the suppliers' production planning system. In this way, supermarkets managed to tighten inter-organisational linkages with their suppliers by also giving positive feedback that overall aimed at reducing costs throughout the supply chain. In another study, Cuganesan and Lee (2006) demonstrated how IT introduced by the focal organisation to control its suppliers had not the intended effects. Contrary to Frances and Garnsey, they found that suppliers were not dominated from the focal organisation's attempt to introduce new controls. Instead suppliers used IT to protect their own interests by reinforcing a "dialectic of accounting control" (Cuganesan & Lee, 2006, p. 143).

In another study, Kulp (2002) investigated the effects of two alternative inventory management systems on information exchange. These systems differed in their assignment of decision rights, namely: a traditional system where the decision to procure inventory remains with the retailer and a vendor managed inventory (VMI) system, where the retailer delegated the decision to supply inventories to the manufacturer. She sought to examine under what conditions a VMI system would be adopted and found that the precision and reliability of internal accounting information as well as the willingness of the retailer to share that information with the

manufacturer, determined choice of the inventory control system. Moreover, her findings marginally supported the assumption that VMI adoption is associated with lower wholesale prices, whilst supported that manufacturer size is positively related to VMI adoption.

There follows a discussion of studies, which emphasised the importance of qualitative (non-accounting-based) and informal controls to enable management control in IORs.

2.3.1.5. Qualitative and informal control mechanisms

According to Håkansson and Lind (2007), informal and non-accounting-based, i.e. qualitative, control mechanisms play a significant role in the management control of IORs.

Non-accounting-based controls can be outcome or behaviour controls such as ordering and supply procedures, policy documents, functional specifications, quality plans, programmes of innovation, through-put time, capacity utilization, productivity, supplier or partner selection and certification, multi-functional and inter-organisational meetings (Anderson *et al.*, 2000; Carr & Ng, 1995; Cooper & Slagmulder, 2004; Cooper & Yoshikawa, 1994; Dekker, 2004, 2008; Gietzmann, 1996; Ittner *et al.*, 1999). Dekker (2004), for example, showed that behaviour controls were adopted in the form of joint task groups and alliance boards that set the guidelines for joint projects and the procedures that should be followed to reduce costs. Similarly, Cooper and Yoshikawa (1994) and Cooper and Slagmulder (2004) showed how joint task groups were involved in revising design specifications and production procedures to reduce costs and support subcontractors improve their operations and select appropriate second-tier suppliers (see also Carr & Ng, 1995).

Apart from qualitative outcome and behaviour controls, a number of studies (Dekker, 2004, 2008; Dekker & Goor, 2000) highlighted the importance of informal controls to complement accounting controls. For example, Dekker and Goor (2000) concluded that while accounting controls play an important role in the management of IORs, they “are certainly not sufficient to realise effective SCM [supply chain management]” (p. 51, parenthesis added) as other factors such as trust, corporate culture, values, norms, and bargaining power influence the behaviour of the parties (see also Kraus & Lind, 2007). On the nature of informal controls, Kraus and Lind argued that they “cannot be explicitly designed, but can be influenced through the choice of partner [...] Because of this, the selection of partner is important if a successful relationship is to be achieved” (p. 280).

Two studies that elaborated on informal controls and specifically on partner selection, culture fit and prior experience with the partner are those of Dekker (2004, 2008). Dekker (2004) showed that enduring prior relationships and compatible cultures were important factors that determined selection of a suitable partner for both of the alliance organisations he examined, while in his 2008 study he investigated the relationship between prior partner experience and partner selection effort. Dekker (2008) argued that when organisations possess prior partner experience, partner selection is influenced by the need to mitigate concerns about large and uncertain transactions, whilst when there is no previous partner experience, partner selection is influenced by the size of the transaction only.

Moreover, Dekker (2004) suggested that partner selection effort moderates the use of formal control mechanisms, while in his 2008 study argued that an extensive search for a suitable partner can “be interpreted as a learning process, not substituting but facilitating the design of

more elaborate governance structures” (p. 22). His findings supported a moderating role for previous partner experience on management control extensiveness and partner selection effort and he concluded that “[p]artner experience thus seems both to substitute and to complement on the use of governance arrangements, depending on the type of control problem (appropriation or coordination) to be managed” (Dekker, 2008, p. 24, parenthesis in original).

Discussion of the role of informal controls to influence organisations’ decisions such as, for example, in partner selection or in the design of inter-organisational management controls, highlighted issues of trust and power. There follows a discussion of studies that elaborated on issues of trust and power and their interrelationship with formal management controls. Studies that focused on issues of trust are presented in the following part, while studies that highlighted the importance of power in IORs are presented thereafter.

2.3.1.6. Issues of trust and the management control of IORs

Issues of trust have been widely researched, particularly with regards to their relationship with formal controls. This is because it has been recognised that the relationship between formal controls and trust in IORs cannot be easily defined due to the “ambivalent behavioural impact of accounting on trust” (Seal & Vincent-Jones, 1997, p. 407).

The literature has approached the relationship between trust and control from functional and non-functional, i.e. alternative perspectives. Research influenced from functionalist theoretical perspectives, e.g. Baiman and Rajan (2002a), Coletti et al. (2005), Cooper and Slagmulder (2004), Cooper and Yoshikawa (1994), Das and Teng (2001), Dekker (2004), Gietzmann (1996), Kamminga and Meer-Kooistra (2007), Langfield-Smith (2008), Langfield-

Smith and Smith (2003), Meer-Kooistra and Vosselman (2000), Ring and Ven (1992), Seal et al. (1999), Seal and Vincent-Jones (1997), Tomkins (2001) and Vélez et al. (2008), has mainly approached the relationship between trust and formal controls through the development of frameworks that consider under what circumstances a trust-based approach to the management of IORs would be preferable to a pattern relying more on formal controls rather than informal controls. On the other hand, non-functionalist research, e.g. Coad and Cullen (2006), Free (2008), Mouritsen and Thrane (2006), Seal et al. (2004) and Thrane (2007), offered a more complex picture on the role of trust than that offered by functionalist papers by highlighting issues of multiple and conflicting interests as well as issues of shared confidence and understandings. Presentation of non-functionalist research follows the presentation of functionalist papers, which is offered below.

In detail, Ring and Ven (1992) and Das and Teng (2001) proposed two frameworks for selecting alternative inter-organisational control patterns according to the levels of trust and risk. Both papers identified trust and control as two important means for risk management in IORs and suggested that these two variables should be combined in specific ways to mitigate specific types of risk. Das and Teng proposed that relational risk can be minimised by a mix of control mechanisms that comprise goodwill trust, behavioural and informal controls, whereas performance risk can be mitigated through a control mix that relies on competence trust, output and informal controls⁵.

⁵ According to Das and Teng (2001), 'relational risk' is unique to IORs and refers to the possibility of the parties to be tempted to withhold information and behave opportunistically in order to benefit less now than to *expect* to benefit more in the future. 'Performance risk' refers to the possibility that the objectives of the venture will not be achieved due to factors exogenous to the characteristics and behaviour of the partners.

On the other hand, Ring and Ven focused on two forms of inter-organisational patterns, namely: recurrent and relational contracting. They argued that long-term, relational contracts are characterised by higher level of risk than recurrent contracts and involve high reliance on trust, whereas recurrent contracts align better with transactions of low risk but which take place repeatedly. They saw an *inverse relationship* between trust and formal controls. To them, the higher the risk involved in the relationship, and in the absence of trust, the more likely it is that the parties will engage into drafting relational contracts providing for increased information exchange to ensure control over highly idiosyncratic assets.

In two other studies, Meer-Kooistra and Vosselman (2000) and Kamminga and Meer-Kooistra (2007) developed typologies of inter-organisational control patterns, namely: market-based, bureaucracy-based and trust-based for an outsourcing relationship (former study), and content-based, consultation-based and context-based for a joint venture relationship (latter study). Their models, as with Ring and Ven (1992), claimed for an inverse relationship between trust and formal controls for they showed that as control arrangements change to align with a trust-based pattern, the importance of social controls and trust, contrary to that of formal controls, increase. They attributed the declining importance of formal controls to the declining levels of output measurability and task programmability of the outsourced activities (former study) and to information asymmetry, asset specificity, parental differences and bargaining power of the parent companies (latter study).

However, Meer-Kooistra and Vosselman (2000) also allowed scope for a *complementary relationship* between trust and formal controls and stressed that “the three management control patterns of inter-firm relationships are ideal types. In practice, we would expect to find elements

of all three patterns in contractual relationships” (p. 59). Langfield-Smith and Smith (2003) also supported a complementary relationship by arguing that “trust plays a limited role in the bureaucracy based pattern, but it is important at the early stages of the relationship” (p. 287). They argued that when the control pattern shifted from a trust-based to a bureaucracy-based one, trust and particularly goodwill trust strengthened as performance targets and contract provisions became more rigid. Langfield-Smith and Smith concluded that “the development of trust may be compatible with the development of tighter accounting controls and contracts, if trust is already well-established and those controls develop in a supportive and cooperative manner, involving both parties” (Langfield-Smith & Smith, 2003, p. 304).

Similarly, Seal and Vincent-Jones (1997) argued that the presence of trust in an IOR prior to introducing formal monitoring mechanisms can influence the very effectiveness of those mechanisms, while Langfield-Smith (2008) asserted that “trust and control are complementary mechanisms within a control package” (p. 362). She argued that trust can be developed in the start-up phase of a non-equity alliance through the establishment of a formal alliance agreement (see also Dekker, 2004; Tomkins, 2001). Arguments for a complementary relationship between trust and formal controls were also supported by Gietzmann (1996), Cooper and Yoshikawa (1994) and Cooper and Slagmulder (2004) who argued that trust, interdependence and information sharing are complementary to the introduction of new forms of management accounting such as open-book agreements and comparative performance rewards, provided that they are applied in a spirit of cooperation. For example, as Cooper and Yoshikawa (1994) argued, for IOCM to be effective “it is critical for each firm in the chain to trust the one above it not to use the shared information to their sole advantage.” (p. 61; see also Carr & Ng, 1995; Dekker, 2003).

On the other hand, Thrane (2007) suggested that as IORs and their networks evolve, the control mix does not move forward in a linear manner, i.e. from a trust-based to a hierarchy-based pattern (e.g. Kamminga & Meer-Kooistra, 2007; Langfield-Smith & Smith, 2003; Meer-Kooistra & Vosselman, 2000; Ring & Ven, 1992), but that it oscillates between these ideal control patterns, at times towards contradictory directions. For example, he noticed that while the network members favoured trust-based controls, the introduction of transfer pricing and profit sharing agreements pushed the network system to move towards a hierarchical control archetype. Thrane (2007) concluded that control archetypes, i.e. trust-based versus formal controls, “do not change relationships in an on-off exercise, but that they create trajectories in which the inter-organisational system travels” (p. 269).

The argument of a complementary relationship between already established trust and accounting controls, however, was further supported by Coletti et al. (2005) and Vélez et al. (2008). Both papers argued that increased monitoring, sanctioning and rewarding can induce higher levels of cooperation whose benefits, when experienced by the parties, can enhance trust. Coletti et al. argued that the “the earlier a strong control system is put into place, the larger are the ultimate trust and cooperation levels achieved” (2005, p. 497). Baiman and Rajan (2002a) also drew similar conclusions and argued that the introduction of management controls, and among those, of accounting controls increases the level of information sharing among the parties and, therefore, contributes to mitigating opportunistic hazards.

At the same time, Vélez et al. (2008) suggested, contrary to Das and Teng (2001), that apart from cultural controls also formal controls have a positive effect on goodwill and competence trust, as they provide “a common language and evidence with a greater appearance

of objectivity, evidence that was needed to reinforce expectations about trustee abilities and competencies” (Vélez *et al.*, 2008, p. 17). In two other studies, Seal *et al.* (1999) and Free (2008) argued that formal controls play a constitutional role in the establishment of trusting IORs, while Seal *et al.* (2004) showed how accounting acts as an abstract system that establishes trust and bridges gaps of control between partners by virtue of its institutionalised attributes that prescribe certain resource allocation patterns, and establish common meanings and norms in the relationship. On this matter, Free (2008) and Seal and Vincent-Jones (1997) argued that the positive effects of formal controls on trust depend on “developments in the contracting and accounting institutions themselves” (*ibid.*, p. 423), suggesting that when formal controls exhibit anonymity, procedural fairness⁶, predictability and inflexibility, they can establish trust in the relationship.

Moreover, Vélez *et al.* highlighted that the reinforcing capacity of formal controls on trust hinges on the parties’ perceiving that these “are used to coordinate activities by improving the provision of relevant information” (2008, p. 22) rather than for monitoring purposes. Tomkins (2001), however, argued that formal controls provide information that is used for both appropriation concerns, i.e. monitoring, and for mastery of events, i.e. coordination of tasks, and concluded that information for mastering events can both reinforce trust and destroy it. Dekker (2004) on the other hand, noticed that while high goodwill trust may replace formal controls in reducing appropriation concerns, such controls are still required for task coordination.

At this point, Tomkins’ (2001) and Dekker’s (2004) studies attempted to integrate in one model scholarly arguments on the substitutive or otherwise complementary relationship between

⁶ That is agents’ agreement on a uniform set of measurement rules that are applied in a fair manner (Seal & Vincent-Jones, 1997).

trust and formal controls. For Tomkins (2001), trust is dynamically built through learning, and information plays a fundamental role in building and experiencing trust at “some earlier stage of the evolutionary process itself” (p. 168). He argued that over the life of an IOR, the association between trust and information availability takes the form of an *inverted U-shape*, meaning that up to a certain point in time information and trust positively presuppose one another, whereas after that point higher levels of trust can develop without further information, and thus, formal controls. Dekker (2004) arrived at similar conclusions with Tomkins and argued for a non-linear pattern, where up to a certain *threshold*, trust and formal controls are positively related while after that threshold, trust is appreciated as a sunk cost that can substitute for further investments in formal controls, which are expensive to implement and probably damaging to the relationship (see also Meer-Kooistra & Scapens, 2008). Overall, Dekker (2004) saw a moderating effect of trust on formal controls and, posited that “the use of formal control mechanisms to manage transaction hazards depends on the level of trust” (p. 34). There follows a presentation of non-functionalist research that engaged with the importance of trust in IORs.

Coad and Cullen (2006) offered alternative explanations on the role of trust in IORs and argued that processes of institutionalising past experiences explain the development of trust, which in turn enables IOCM initiatives (see also Nooteboom *et al.*, 1997; Tomkins, 2001). The authors argued that “*routines*, a key building block of evolutionary theories, *act as a basis for trust*” (Coad & Cullen, 2006, p. 358, emphasis in original) and that trust, commitment and information systems “may act as valuable *precursors* for effective IOCM” (ibid, p. 362, emphasis in original). However, at a later stage of their analysis Coad and Cullen (2006) acknowledged that it may be the learning inclinations of powerful individuals and their related willingness to adapt

their organisation's accounting routines to accommodate IOCM that contributes to overcome conflict and facilitate a truce in IORs. This argument of Coad and Cullen came to question "studies that appear to have automatically inferred the existence of *trusting relationships*" (2006, p. 367, emphasis in original).

Moreover, Free (2008) supported the views of Coad and Cullen on the potential of a truce accommodating power asymmetries prior to establishing formal controls. He argued that 'trusting behaviour', i.e. trust-in-action, should be distinguished from trust-as-discourse, because the latter could be used as a means for making symbolic statements to mask "consolidation rather than the dispersion of power" (Free, 2008, p. 652). Free examined how 'category management' an approach similar in concept to IOCM, was initiated upon parties' discourses on trust, which though was later on destroyed once it was realised that the discourses did not materialise in trusting behaviour.

On the other hand, Mouritsen and Thrane (2006) perceived trust as a 'quasi-object', an 'aspect of evaluation' and "a problematising device – a perspective from which the [contracting parties'] ethos of obligations is questioned" (p. 273, parenthesis added). Trust for them can only take a form of a moralising argument existing unobtrusively in settings where control mechanisms already apply to provide a level of predictability about what should constitute standard inter-organisational practice. For Mouritsen and Thrane, trust becomes important when parties to an IOR perceive "*the probability of its absence*" (p. 270, emphasis in original; see also Johnsen & Ford, 2005) to be significant, i.e. when they perceive a probability of breach in the conduct of formal controls.

This part considered research that contributed on issues of trust and further on the relationship between formal controls and trust. The following part engages with the role of power and its influences on the nature of IORs and their management.

2.3.1.7. The importance of power in the management of IORs

Kraus and Lind (2007) observed that “interdependence is a central ingredient in inter-organisational relationships” (p. 269), while for Tomkins (2001) an organisation’s embeddedness in a network suggests that there are certain limits to its ability to take decisions independently of the other network members (see also Håkansson & Lind, 2004).

At the same time, Cooper and Slagmulder (2004) argued that the success of IORs depends on the parties’ capacity to manage their dependence relative to the resources possessed by their counterparts. Interdependence, however, between organisations is often asymmetric because the resources they exchange do not have the same importance to them, suggesting power asymmetries thereto (Donada & Nogatchewsky, 2006). Donada and Nogatchewsky (2006) observed at this point that “[s]ince power is inversely correlated to dependence, asymmetry confers net power on the less dependent firm” (p. 262). Power, in turn, is an expression of the, often political, activities that a party undertakes in order to drive action to desired directions and eventually outcomes (Burns, 2000).

On the basis of the above, it is argued here that the literature of IOCM and control has been informed by not only notions of trust but also notions of power which depict parties in IORs to be in “a continuous war of manoeuvre – with each party striving to achieve their ideal goals in constantly changing circumstances” (Cox, 2004, p. 418). Free (2008) observed that power and

trust embody two antagonistic schools on the nature of business-to-business exchange. The trust-based school advocates mutuality, reciprocity, commitment and willingness for mutual adjustment in IORs (e.g. Cooper & Slagmulder, 2004; Dekker, 2003), while the power-based school advocates a win-lose perspective in IORs where competitive exploitation is the norm rather than the exception (e.g. Cox, 1999, 2001, 2004). Free conceptualised a complex relationship between power and trust in the coordination of 'cooperative' relationships by arguing that "power can be obfuscated behind a façade of trust and collaboration and can be used to promote vested interests and exploit weaker partners" (2008, p. 635). He concluded that "what appears to indicate trust and trustworthiness may in fact be largely a consequence of domination, lack of alternatives, or simple mutual dependency" (Free, 2008, p. 650).

An example of research influenced from the power-based school in the management of IORs is Cox (1999) who suggested that because organisations aim to achieve maximum profitability, they should preferably outsource only those activities that are of low value to them and which have low barriers to market entry. This strategy, he argued, should ensure their dominance in the relationship and their maximum appropriation of value (Cox, 1999; Johnsen & Ford, 2005). Cox (2001) further argued that "any corporate 'best practice' in pursuing and managing IORs is clearly contextually and relationally dependent" (p. 42), suggesting that power structures determine what is the most desirable strategy for IORs. He argued that a collaborative approach may not be appropriate under all circumstances and that a 'win-win' strategy in buyer-supplier relationships hinges on the concept of mutuality, which calls for equity and fairness in sharing benefits and costs. However, he argued that if value maximisation is the primary objective of organisations, then mutuality in IORs is incompatible with it, unless mutuality is

defined in a relaxed, contested form devoid of concepts of equity and fairness. For Cox (2004), IOCM and control initiatives need not always be based on mutual effort and fair share of the benefits, and successful IORs should not always be assumed to be of a close, collaborative nature (Cox, 2001, 2004; Gietzmann, 1996).

Similar arguments were provided by Johnsen and Ford (2005) who showed how an organisation's direct intervention in a supply network was used to obtain lower costs and appropriate maximum value. The authors demonstrated, contrary to Carr and Ng (1995) and Cooper and Slagmulder (2004), that the buyer organisation enhanced its power position through creating cost transparency with its suppliers, while it decreased its dependency by developing alternative sourcing strategies. Overall, the strategy described by Johnsen and Ford (2005) relied on power to leverage suppliers to provide resources under minimum cost and comply fully with the specifications of the customer. Further, Berry (1994) argued that there is increased need for sharing cost data among network organisations under both dominant and collaborative modes of control. He asserted that a dominant control pattern emerges from the power of a certain organisation to align the network organisations' activities to its requirements through, e.g. asking them to "open their internal accounts to the dominant actor" (p. 7).

Moreover, Carr and Ng (1995) observed that power differentials in IORs deter the adoption of such controls as open-book accounting because of the fear that the disclosed cost data could be misused by the dominant party. On the other hand, Cooper and Yoshikawa (1994) argued that power differentials and coercive mechanisms on behalf of the more powerful organisation encouraged the implementation of target costing. Power differentials in IORs were also examined by Donada and Nogatchewsky (2006) who examined the mix of controls buyer

organisations employ in their supply IORs (Cox, 1999, 2001, 2004). Donada and Nogatchewsky identified two situations of asymmetric dependence, namely ‘lord’ and ‘vassal’ buyers respectively. They reported that when buyer organisations enjoy conditions of ‘lordship’, they opt for governance modes that use complementarily market, bureaucratic and social-based controls supporting the assertions of Håkansson and Lind (2004) who argued for an “entanglement of the three modes of control when interfirm relationships are complex” (p. 284; see also Berry, 1994; Thrane, 2007).

Further, Cäker (2008) demonstrated that under conditions of ‘lordship’ for the buyer, bureaucratic controls were supplemented with or by-passed by informal controls, particularly when the former were considered problematic in the coordination of the supply relationship. He suggested that rigid bureaucratic controls were accepted by dominated suppliers “as a means to preserve a business relationship rather than to enhance efficiency” (Cäker, 2008, p. 248). From a different perspective, Anderson and Dekker (2005) referred to the nature of control mechanisms in situations of asymmetric dependence and argued that in cases where suppliers enjoyed relative power, contractual controls included more detailed after-sales and legal recourse clauses to mediate ex post performance problems. In contrast, where there was high competition among suppliers, contracts relied more on clauses that specified the product and its price and less on assignment of rights.

Now as regards circumstances of ‘vassalage’, Donada and Nogatchewsky argued that buyer organisations resorted to a social-based governance mode where “trust and relational norms enable firms to moderate the negative effects of dependence, in particular to limit transactional risk and reduce information asymmetry” (2006, p. 284). On the other hand, Cäker

(2008) showed that social controls are important even in circumstances of 'lordship' for the buyer, as they can provide the dominated suppliers with flexibility to by-pass bureaucratic controls and correct "the picture shown of them" (p. 249). Cäker argued, however, that while bureaucratic controls can be by-passed by informal controls, they can be set aside only temporarily as change of them is hard because dominating organisations "have good reasons to keep standardized inter-faces in their ties with suppliers, in order to reduce complexity" (2008, p. 249).

Further, there have been studies, which employed 'alternative' theoretical perspectives and which acknowledged that modes of management control can be employed to confer power to organisations to determine organisational boundaries and governance modes for IORs as well as to influence the distribution of power between the parties. For example, Berry (1994) argued that informal controls and organisations' management culture contribute to a collaborative mode, while Thrane and Hald (2006) suggested that the relationship between "accounting and context/boundary is a duality – they mutually condition each other in a dynamic, emerging process shaped and developed by inter-dependencies, the structuring of field, accounting devices and local learning processes" (p. 312). The authors identified such factors as rational deliberations, cultural symbols and accounting devices to explain the dynamics of integration and fragmentation, which condition the establishment of IORs.

Two further studies, which highlighted the importance of power to implicate processes of integration and fragmentation is Håkansson and Lind (2004) and Jones (1999). In particular, Håkansson and Lind showed how certain departments of Ericsson and Telia Mobile changed power relations between the two organisations through establishing a common identity and

agenda that aimed to support their local interests, regardless of whether this could run against the interests of other departments in their organisations. Jones on the other hand, demonstrated that introduction of collaborative cost management controls in the UK NHS resulted in increased transparency of costs that threatened interest groups from the interacting units, which then sought to protect their privileges by resisting the adoption of a more collaborative mode.

Moreover, on the role of accounting controls to influence the distribution of power in IORs, Mouritsen et al. argued that they can exercise “power to try to establish centres in relations beyond the organisation” (2001, p. 241) as well as to effect changes to the internal structures of the organisations who first set these controls in place (see also Thrane & Hald, 2006). Similar conclusions on the unintended consequences of accounting controls in the distribution of power were also drawn by Cuganesan and Lee (2006), while Mouritsen (1999) showed how accounting controls made possible “to control production at a distance” (p. 53) and deem the organisation the ‘informational centre’ of an entire network (see also Frances & Garnsey, 1996), involving customers and subcontractors.

Extending ‘alternative’ theoretical contributions on the power attributes of accounting controls in IORs, Chua and Mahama (2007) argued for their capacity “in perpetuating or transforming particular social norms” (p. 54) that construct network identity and influence perceptions of network performance (see also Frances & Garnsey, 1996). Moreover, Sydow and Windeler (1998) showed that enactment of such controls dominates definitions of network effectiveness in terms of not only the resources possessed and allocated, but also the meanings and rules of what counts as economic and as acceptable performance. Similarly, Mouritsen and Thrane (2006) showed “*how* accounting is a ‘force’ – an actor – in establishing and developing

inter-organisational relationships” (p. 242, emphasis in original), while Chua and Mahama (2007) revealed that the “emergence, operation and functionality of accounting numbers are network effects” (p. 80). On this matter, they argued that conflict may arise “as to which number to use or what the same “number” means in different locales and times” (Chua & Mahama, 2007, p. 55; see also Baxter & Chua, 2003).

In support of the symbolic resources of accounting controls, Sydow and Windeler further showed that they can not only be employed to enhance mutuality, commitment and reciprocity, but also be used by members of the network, especially powerful managers, to generate interpretations and meanings influencing a “network-wide understanding of what is considered to be effective” (1998, p. 277). Finally, Chua and Mahama (2007) argued that control systems, whilst traditionally portrayed as stabilisers reconciling conflict, may also act as sources of ambiguity and uncertainty, and therefore, power and information asymmetries.

There follows, in the next sub-section, a presentation of research that contributed insights on modes of IOCM.

2.3.2. Modes of inter-organisational cost management (IOCM)

As mentioned previously, modes of IOCM refer to those accounting-based techniques, i.e. value chain analysis (VCA), total cost of ownership (TCO), target costing, price-quality-functionality (PQF) trade-offs and minimum cost investigations (MCIs), which not only coordinate inter-organisational activities along with management controls, but also measure and record costs, informing managers’ decisions for the achievement of cost efficiencies.

Kraus and Lind (2007) observed that “[a] number of techniques, most of which are accounting based, can be used to control inter-organisational outcomes” (p. 276), while Axelsson et al. (2002) argued that modes of IOCM can act as strong determinants and barriers, at the same time, of an organisation’s ability to engage in IORs.

There follows a classification of research according to its focus on modes of IOCM.

2.3.2.1. Value chain analysis (VCA)

VCA is an inter-organisational accounting practice that has been advocated and examined in several studies (e.g. Coad & Scapens, 2006; Dekker, 2003; Hergert & Morris, 1989; Shank & Govindarajan, 1992). The technique is used to “analyse, coordinate and optimise linkages between interdependent activities in the value chain” (Kraus & Lind, 2007, p. 278) by breaking it down into strategically relevant segments and revealing cost patterns and sources of differentiation (Shank & Govindarajan, 1992).

In detail, Shank and Govindarajan (1992) developed the first study that advocated the VCA for analysing costs incurred externally to organisations but which affect their profitability. They developed a methodology for operationalising VCA that first identified strategically relevant segments or stages in the value chain, and then broke down each stage into a set of inter-linked activities, while it proceeded to identify cost drivers to assign costs and revenues to the relevant stages. Finally, their methodology comprised assessing each activity against the make-or-buy and the backward/forward integration alternatives. Most importantly for the cost management and control of IORs, Shank and Govindarajan showed that VCA can be used as a way to assess the power of suppliers and customers and exploit linkages with them in a mutually

beneficial way (see also Hergert & Morris, 1989). While the authors acknowledged that VCA involves calculational difficulties, they concluded that “[e]ven the process of performing the value chain analysis, in and by itself, can be quite instructive” (p. 184) by forcing managers to assess the value contribution of their activities to the whole chain.

Further, Dekker’s (2003) case study provides one of the most detailed empirical descriptions of VCA. While Anderson et al. (2000) asserted that VCA is conducive to a TCO perspective, Dekker (2003) went a step further to argue that TCO is not as collaborative and holistic in terms of coordinating costs both downstream and upstream the supply chain as is VCA. His study showed how a UK supermarket implemented an ABC system with a group of suppliers where it used cost information to initiate cost reduction initiatives with them. The ABC model was based on VCA principles and aimed at advancing cost reduction opportunities with suppliers through providing information that supported such inter-organisational analyses as benchmarking, strategic what-if analyses, and trend analyses.

Dekker showed that VCA acted as a basis for determining how the results from cooperation would be allocated to the parties. He also argued that its successful adoption rest in the focal organisation’s commitment to refrain from using any accounting information shared with its suppliers to coerce them and create direct competition (Carr & Ng, 1995; Gietzmann, 1996; Seal *et al.*, 1999). For that purpose, the supermarket he studied classified suppliers in groups of relatively homogenous activities and used the average performance of the group to compare each supplier’s activity costs via benchmarking. In this way, it managed to avoid direct comparisons between suppliers, enhancing thus, goodwill and commitment for cooperation and mutual cost benefits.

Another study which provided a case for VCA is that of Coad and Cullen (2006). The authors reported on the initiative of the focal organisation to undertake a VCA project first internally, and then in its supply chain where VCA's potential to sustain IOCM was examined. They observed that the way accountable individuals were inclined towards learning goals influenced the success of the VCA project, which comprised process mapping activities, business process re-engineering (BPR) and ABC (see also Dekker, 2003). They argued in this respect for "a causal link between the institutional context, the adoption of learning goals by key individuals, and the use of *new* cost management routines" (Coad & Cullen, 2006, p. 364, emphasis added), such as VCA. Whilst the authors dismissed an overly deterministic path-dependence to the change of cost management controls, they argued that path-dependency explains how current institutionalised cost management routines influence the very nature of search routines or heuristics, such as for example, the VCA project. Their study interpreted IOCM practices, including VCA, as dynamic and evolving for they were seen to "spill over from the organisational to the inter-organisational domain and vice versa" (Coad & Cullen, 2006, p. 367).

There follows discussion of research that examined the total cost of ownership and its contribution to IOCM.

2.3.2.2. Total cost of ownership (TCO)

TCO is another inter-organisational technique for managing costs and integrated information systems and open-book accounting can act as enablers of its adoption because it relies on the availability of reliable accounting information.

Wouters et al. (2005) undertook a survey of TCO to identify factors influencing its successful adoption. The authors perceived TCO as an inter-organisational application of ABC for they argued that it is nothing more than a rationalisation of those activities driving costs that are related to purchasing from suppliers (see also Seal *et al.*, 1999). TCO for them resembles ABC in that it identifies the cost drivers of activities, while it also differs from it in that it applies these concepts to activities that traverse organisational boundaries. Their study identified such TCO-motivating factors as: competitive pressure in customer markets; strategic purchasing orientation; top management support; functional management commitment; value analysis experience; adequacy of TCO information; success of past TCO initiatives, and use of TCO-based review and reward systems.

A basic contribution of their research is that TCO can support an organisation's sourcing strategy not only in making wise supply decisions, but also in facilitating long-term supplier partnerships to "improve mutual profitability for the supplier and customer by modifying how they do business together" (Wouters *et al.*, 2005, p. 169). The authors observed, in support of Ittner et al. (1999), that in order for TCO to deliver mutual cost benefits it is necessary that suppliers' selection criteria consider apart from a comparison of the purchase price (Gietzmann, 1996), also opportunities for overall value improvement through the reconfiguration of activities, frequent meetings with suppliers as well as through their involvement in strategic planning and their certification. Finally, as with Ittner et al. (1999), they emphasised that TCO information can improve cooperation in IORs when, apart from a total cost trade-off perspective, the parties embrace a total value of ownership (TVO) perspective, which recognises that "the value of a

higher priced offering may come from revenue improvements and not only, or not at all, come from total cost savings” (Wouters *et al.*, 2005, p. 187).

2.3.2.3. Target Costing

Target costing and the related functional analysis are cost management techniques that emerged from Japan (Håkansson & Lind, 2007). Both techniques apply to a product’s design and development process, i.e. before the product is manufactured, and aim to reduce its overall cost with the collaboration of suppliers (Carr & Ng, 1995; Cooper & Slagmulder, 2004; Cooper & Yoshikawa, 1994).

Axelsson *et al.* (2002) argued that target costing is “the main tool in inter-organisational cost management” (p. 55), Coad and Scapens (2006, 2007) posited that it is a heuristic for applying IOCM, while Cooper and Slagmulder (2004) showed that it was at the heart of the IOCM practices they investigated. A prerequisite for target costing is that the cooperating organisations can rely on their internal accounting systems to generate accurate cost information and, therefore, highlight areas for potential improvements (Nicolini *et al.*, 2000). To this end, Axelsson *et al.* (2002) argued that ABC can help provide reliable cost information to support apart from open-book accounting, also the implementation of target costing. Dekker and Van Goor, however, argued that enacting ABC inter-organisationally may be challenging because “organisations work with different accounting systems, and have different cost structures” (Dekker & Goor, 2000, p. 47).

A study that reported on target costing is Carr and Ng’s (1995) which showed how Nissan’s UK target costing project involved the establishment of target costs through regular

meetings with suppliers where their cost breakdowns were discussed and support was provided to them for achieving the overall cost target. Support materialised through discussing with suppliers ways to improve their operations such as by running material investigations, process studies and suggesting to them alternative sources of sub-supply. In this respect, Nissan managed through target costing to achieve total cost control that also extended to its second-tier suppliers.

Contrary to Nissan's UK more collaborative practice, Cooper and Yoshikawa (1994) reported that once the target cost of the end product was determined by Tokyo (i.e. the customer organisation) the target cost of supply components was also set. Then, Tokyo was undertaking comparisons between suppliers' quotations and the specified target costs of components. In those cases where the quoted prices were above the target costs it was entering into negotiations with suppliers and operating incentive plans for cost reduction ideas (see also Anderson *et al.*, 2000; Castellano & Young, 2003). The authors reported that "if a supplier's idea is accepted, that firm is awarded a significant percentage of the contract for the component for a specified period" (Cooper & Yoshikawa, 1994, p. 55). In another study, Mouritsen *et al.* (2001) showed that the case organisation employed the functional analysis aspect of target costing with the aims of establishing cost control of its outsourced activities and maintaining high levels of innovation. To control costs, the focal organisation presented its suppliers with its overall procurement budget in order to enhance cost consciousness.

There follows discussion of research that highlighted two further techniques for enacting IOCM, namely price-quality-functionality trade-offs and minimum cost investigations.

2.3.2.4. Price-quality-functionality trade-offs and minimum cost investigations

Cooper and Yoshikawa (1994) and Cooper and Slagmulder (2004) made a substantial contribution to the study of IOCM, as both studies examined the accounting techniques that can be employed to assist its implementation in the context of Japanese supply chains.

Cooper and Yoshikawa suggested that IOCM systems create “downward cost pressures on the entire supplier chain” (1994, p. 52) and, along with Cooper and Slagmulder (2004), reported on three IOCM techniques, of varying levels of interdependence and cooperation, namely: *target costing*, *price-quality-functionality (PQF) tradeoffs*, and *minimum cost investigations (MCI)*. Cooper and Yoshikawa described the PQF trade-offs and MCI practices that were employed by the middle-level (first-tier supplier) organisation, i.e. Yokohama (see also Cooper & Slagmulder, 2004). PQF trade-offs involved Yokohama exploring “ways to provide its customers with products whose quality, functionality, and price are acceptable, but below the levels originally requested by the customer” (Cooper & Yoshikawa, 1994, p. 56). A typical level of cost savings with this technique was 0-5%. At a further level, MCI were initiated when suppliers, i.e. Yokohama, could not produce profitably the requested components at the specified target price. The technique involved inter-organisational and inter-functional meetings that sought to identify the cost contributions of each organisation to the total cost of the component and then suggest ways of cost reduction.

Cooper and Slagmulder (2004) instead, reported that inter-organisational minimum cost investigations were implemented when the manufacturing cost of the end product exceeded the target cost by too much for the PQF technique to yield adequate cost reductions. MCI involved inter-organisational redesign of end product components to make it more efficient and typically

resulted in cost savings of around 5-10%. Finally, the authors reported that concurrent cost management, which represented a more intensive cost reduction effort than PQF and MCI, was employed when organisations needed to achieve more aggressive cost reductions of around 10-15%, a target though that required earlier supplier involvement in the design process and major functional design changes.

In summary of the above, Agndal and Nilsson (2009) argued that contrary to previous literature on IOCM, which viewed its practice simply as a function of relationship, transaction and component characteristics (Coad & Cullen, 2006; Cooper & Slagmulder, 2004; Cooper & Yoshikawa, 1994; Kajüter & Kulmala, 2005; Seal *et al.*, 1999), different activities involved in an IOR implicate different IOCM techniques, different levels of collaboration and different use of suppliers' management accounting. In particular, they posited that the nature of the IOR and component complexity moderate how IOCM is implemented, as for less complex products and, therefore, for more superficial relationships, IOCM techniques and the suppliers' cost data play a less significant role. Moreover, they asserted that earlier activities in the relationship, e.g. supplier selection, concept discussion, joint product design and joint process development (see also Ellram, 2002), justify the most intensive collaboration on IOCM issues and the greatest joint use of suppliers' management accounting. They argued that this is so, because these activities can offer the greatest potential for cost savings on the final cost of the product. Agndal and Nilsson concluded that high collaboration on IOCM issues does not necessarily involve corresponding use of the suppliers' management accounting and vice versa.

This Section engaged with an overview of the literature in IOCM and control by distinguishing between research that focused on modes of inter-organisational control and

research that focused on modes of IOCM. The following Section provides a synopsis of the achievements recorded so far.

2.4. Summary of research to date

An overview of the achievements of research to date is organised through providing summaries of the insights offered in research from functionalist and non-functionalist theories and then of the contributions made in terms of modes of inter-organisational control and modes of IOCM. This overview of achievements will lead to a discussion of opportunities for further research in the following Section.

2.4.1. Insights offered from functionalist theories

Functionalist research in IOCM and control has predominantly been informed by TCE. However, all the previously mentioned functional approaches have also been influential (Anderson & Dekker, 2005; Baiman & Rajan, 2002a; Banberg & Spremann, 1987; Birnberg, 1998; Cox, 1999, 2001, 2004; Dekker, 2004; Håkansson & Lind, 2004; Johnsen & Ford, 2005; Kulmala *et al.*, 2002).

TCE explains the reasons behind organisations resorting to hybrid organisational forms, i.e. to IORs. The make-or-buy decision, which can lead to the establishment of IORs, is approached by TCE through an ‘optimal’ alignment between the three generic modes of governance, i.e. market, hybrid and hierarchy, and transactions. The characteristics of the transaction and the environment along with assumptions on human nature inform the make-or-buy decision, which organisations undertake in order to minimise transaction costs. In particular,

asset specificity along with frequency, uncertainty, small numbers, information asymmetry and opportunistic behaviour are major determinants of the make-or-buy decision, which informed archetypal research in IOCM and control (e.g. Birnberg, 1998; Bogaard & Speklé, 2003; Dekker, 2004; Kamminga & Meer-Kooistra, 2007; Langfield-Smith & Smith, 2003; Meer-Kooistra & Vosselman, 2000; Speklé, 2001; Vosselman, 2002). This stream of research sought to formulate archetypes of management control and provide guidance on the control mix that managers should adopt for specific transactions. The relationship between formal and informal controls, particularly of trust, was of concern to archetypal research, which also sought to examine what would be the ideal control archetype as an IOR emerged and matured.

Further, incomplete contracting and agency theory account for the impact that bounded rationality, information asymmetry and opportunism have on the management of IORs by developing a set of management controls that safeguard the parties in the relationship (e.g. Anderson & Dekker, 2005; Anderson *et al.*, 2000; Baiman & Rajan, 2002a; Banberg & Spremann, 1987; Eisenhardt, 1989; Jensen & Meckling, 1976; Zaheer & Venkatraman, 1995). The importance of formal and informal controls such as trust, self-restraint and incentive schemes to curb information asymmetry and opportunism is highlighted by these approaches (e.g. Barney & Hansen, 1994; Gietzmann, 1996; Nooteboom, 1997). For example, incomplete contracting acknowledges that a complete contract is not possible to anticipate every contingency in IORs and emphasises the role of formal and informal controls to fill the gaps of contractual provisions (see Gietzmann, 1996).

On the other hand, SMT, industrial economics and resource-based theories informed research that proposes IOCM and control mechanisms, e.g. VCA, target costing, BPR, to confer a

strategic perspective in management accounting capable of considering activities and costs that take place beyond an organisation's legal boundaries. The focus has been to develop control mechanisms that safeguard the position of the organisation in a value chain through generating and protecting strategic capabilities that are sustainable. At the same time, organisation theory and resource-based theories show how (inter)-dependences between organisations can be managed through the development and exchange of capabilities and resources as well as management controls that seek to improve communication and resolve conflicts.

Overall, functionalist theoretical approaches have provided insights to the cost management and control of IORs, which are of a general, i.e. abstract level, and are predominantly deterministic. This is because these frameworks approach IOCM and control from a distance, ignoring that it is a social phenomenon that cannot be sufficiently modelled in terms of austere relationships and archetypes. Functional approaches prescribe cause-and-effect relationships that are invariably linear and generalisable. At the same time, they are devoid of considerations of the role of context and agency to provide for a dynamic, processual perspective, which may surface unpredictable outcomes on the nature and practice of IOCM and control.

2.4.2. Insights offered from non -functionalist theories

Contrary to functional theoretical frameworks, which have dominated research to date, non-functional theories have not been as widely employed and have only relatively recently been deployed to examine IOCM and control (Child, 1997; Chua & Mahama, 2007; Coad & Cullen, 2006; Cuganesan & Lee, 2006; Free, 2008; Håkansson & Lind, 2004; Mouritsen *et al.*, 2001; Mouritsen & Thrane, 2006; Seal *et al.*, 2004; Sydow & Windeler, 1998; Thrane, 2007; Thrane &

Hald, 2006). Still, there remains much to be gained in our understanding of IOCM and control from employing non-functionalist approaches, not least in terms of refining and extending the insights offered by functionalist studies.

For example, ANT has contributed significant insights to our understanding of IOCM and control through promoting the active role of technological artefacts, and among those of accounting-based and other management controls, to shape relations, performance and understandings in inter-organisational networks (Chua & Mahama, 2007; Cuganesan & Lee, 2006; Mouritsen *et al.*, 2001). ANT places emphasis in the relationality, performativity and heterogeneity of social relations, suggesting that *in-situ* IOCM and control arrangements may differ as they are contextually dependent on multiple actors who interact in a network to pursue their interests. Interests, power and understandings or else translations are central concepts in ANT, and IOCM and control is approached as an artefact employed in interaction, which contributes to these social phenomena. For example, according to ANT, IOCM and control techniques can be employed to achieve desired ends, e.g. shape network identity and performance in ways that may not necessarily involve the accomplishment of economically rational objectives. On the other hand, the Industrial Network approach emphasises the inter-dependence of organisations in a network and the importance of learning and communication to achieve desired performance targets (Håkansson & Lind, 2004; Håkansson & Lind, 2007; Tomkins, 2001).

Further, the insights of ST contributed a processual approach to research in IOCM and control where issues of meanings, morality and power are implicated in the reproduction and change, by knowledgeable agents, of structures of signification, legitimation and domination (Macintosh, 1994; Sydow & Windeler, 1997, 1998). On the processual nature of ST, Conrad

(2005) argued that it “affords a way of making sense of the social processes which have helped shape management control. It can contribute to an analysis of the changes which have taken place at an organisational level and at a wider social level, which have led to the emergence of new social systems” (p. 4).

Under ST, efficiency and effectiveness, which are among others shaped and measured by IOCM and control techniques, are both mediums and outcomes of interactions among multiple agents who draw from the aforementioned structures in the form of rules and resources (Sydow & Windeler, 1997, 1998). Structures of domination are central to economic social systems and are reproduced and changed by the deployment of resources in interaction. Resources are distinguished in authoritative and allocative and are both implicated in IORs. IOCM and control mechanisms represent and comprise such resources, and therefore, are implicated in the production and reproduction of structures of domination as are also implicated in the production and reproduction of rules that underpin structures of signification and legitimation (Sydow & Windeler, 1997, 1998). ST, therefore, introduces a dynamic perspective in the research of IOCM and control where structuration processes, i.e. the production and the reproduction of structures by knowledgeable agents, provide insights on the importance of power relationships, resource ownership and value generation as well as on the importance of meanings and legitimacy on, e.g. what counts as important and acceptable.

An overall conclusion from comparing the potential of functionalist and non-functionalist theories is that the latter are better able to study network relationships as compared to functionalist approaches, which are more suitable for studying dyadic relationships (see Chua & Mahama, 2007; Håkansson & Lind, 2007; Kraus & Lind, 2007). There follows, a discussion of

the achievements recorded so far in terms of research in modes of management control and IOCM.

2.4.3. Contributions to modes of inter -organisational control

Research in modes of inter-organisational control highlighted the importance of informal controls and other relational attributes such as power and trust in influencing the practice of not only formal management controls such as contracts, open-book accounting, integrated information systems and performance measurement and rewards, but also IOCM techniques.

The inherent incompleteness of contracts and the importance of informal controls as well as of such formal controls as performance measurement, rewards and incentive schemes to enhance cooperation and self-restraint between the parties were highlighted (e.g. Baiman & Rajan, 2002a; Gietzmann, 1996; Seal *et al.*, 1999). Moreover, research showed that open-book accounting was employed as a way to increase transparency through extensive information sharing and to stimulate learning of each party's operations, whereas other research highlighted its often one-sided and coercive deployment to achieve unilateral benefits (Johnsen & Ford, 2005; Kajüter & Kulmala, 2005; Munday, 1992). At the same time, it was shown that successful implementation of integrated information systems, hinges on the quality of the parties' management accounting systems, their technological sophistication as well as on relations of power and trust (e.g. Cuganesan & Lee, 2006; Frances & Garnsey, 1996; Kulp, 2002).

A further achievement of extant research is that it highlighted the importance of informal controls to influence the implementation of IOCM techniques. Self-restraint from opportunism, commitment, trust, reputation, power, cultural fit and previous experience were shown to

condition effective application of modes of IOCM (e.g. Barney & Hansen, 1994; Cäker, 2008; Dekker, 2008; Donada & Nogatchewsky, 2006; Nooteboom, 1997; Zaheer & Venkatraman, 1995). Research explained that the importance of informal controls resides, among others, in that there is no single authority to exercise fiat and determine how resources are to be distributed, who should excel effort and how it is to be measured (Seal *et al.*, 1999). For example, it was emphasised that successful implementation of open-book accounting in terms of revealing areas for mutual cost benefits were conditioned by the more powerful party's commitment and self-restraint not to misuse its counterpart's intimate cost information (Carr & Ng, 1995; Dekker, 2003; Johnsen & Ford, 2005).

As regards the role of trust, research initially adopted two antithetical positions on the relationship between trust and management controls. Some researchers advocated a substitutive relationship (e.g. Kamminga & Meer-Kooistra, 2007; Meer-Kooistra & Vosselman, 2000; Ring & Ven, 1992), whereas others argued for a complementary relationship (Cooper & Slagmulder, 2004; Cooper & Yoshikawa, 1994; Gietzmann, 1996; Langfield-Smith & Smith, 2003). Further achievements on the relationship between trust and formal controls have been made by research that argued for a non-linear relationship (Dekker, 2004; Tomkins, 2001). This research argued that learning of each party's activities at an earlier stage of the relationship is encouraged by more formal controls, which in turn improve trust. However, once trust is established, additional formal controls can damage trust.

Apart from the above achievements, which have been influenced by a functional perspective, there have also been non-functional contributions on the role of trust. For example, it was argued that trust may simply be a moralising argument which becomes important when there

is evidence of breach in the conduct of formal controls (Mouritsen & Thrane, 2006). Other insights demonstrated the power of pioneering individuals to influence the adoption and practice of formal controls so that what appears as trust in IORs, to be in fact a truce between parties with potentially conflicting interests (Coad & Cullen, 2006) or a way to mask consolidation of power to the dependent parties (Free, 2008).

As regards the role of power in IOCM and control, an overall achievement was recognition that IORs are formed and cost management and control techniques are employed almost invariably by parties that possess different levels of dependency and, therefore, power. It was argued that the power position of an organisation relative to that of its counterpart organisations ascertains the most desirable strategy for this organisation in the management of its IORs (Cox, 2001). Such research concluded that a close collaborative approach to IOCM and control may not be appropriate under all circumstances (Cox, 2001, 2004; Gietzmann, 1996; Johnsen & Ford, 2005).

Moreover, research articulated the type of controls that are exercised by dominant or alternatively weaker parties in IORs. Informal controls, for example, were shown to be employed by the weaker party in order to by-pass the rigid bureaucratic controls set by the dominant party and resolve problems that damage their profile (Cäker, 2008; Donada & Nogatchewsky, 2006). On the other hand, dominant parties were shown to employ both formal and informal controls in the management of their IORs and to maintain standardised interfaces with their counterpart organisations through exercising management controls consistently (Cäker, 2008; Donada & Nogatchewsky, 2006).

There follows an overview of the status of research to date in terms of modes of IOCM.

2.4.4. Contributions to modes of inter-organisational cost management

Research in modes of IOCM and control emphasised that IORs require management accounting controls quite different from those of the hierarchy or the arm's-length alternative, which relies on competitive-bidding to squeeze the other party's profit margins and maximize value appropriation (e.g. Cooper & Slagmulder, 2004; Dekker, 2004; Gietzmann, 1996; Hopwood, 1996).

Achievements in modes of IOCM refer to providing insights on relatively 'new' management accounting techniques such as VCA, TCO, target costing, PQFs and MCIs. The major preoccupation was how these techniques were applied in specific settings, the conditions which favoured their implementation and the effects they had to the parties. Research emphasised that the aforementioned management accounting controls generate cost and operational benefits, which can accrue from cooperation and mutual commitment. Mutually beneficial cost and value benefits were reported to materialise through, for example, the selection and certification of suppliers, their earlier involvement in the design process, the exchange of cost and operational information and the reconfiguration of activities through material investigations, process studies and alternative sources of sub-supply (Carr & Ng, 1995; Cooper & Slagmulder, 2004; Cooper & Yoshikawa, 1994; Dekker, 2003; McIvor & Humphreys, 2004; Seal *et al.*, 1999). At the same time though, research also underlined the importance of power and trust to condition not only the successful implementation of modes of IOCM, but also their use as means to either achieve mutually beneficial outcomes or exercise cost control and monitoring to the benefit of the dominating party (e.g. Coad & Cullen, 2006; Cooper & Slagmulder, 2004; Cooper & Yoshikawa, 1994; Free, 2008; Johnsen & Ford, 2005).

Research in modes of IOCM elaborated on the conditions that make their implementation possible and the effects they have to the parties. For example, it was shown that in order for target costing to achieve mutually orchestrated cost efficiencies, the parties need to have reliable internal accounting systems and to have established widely accepted practices of management accounting (e.g. Axelsson *et al.*, 2002; Carr & Ng, 1995; Kulmala *et al.*, 2002). Otherwise, this research concluded, even the practice of extensive information sharing through, e.g. open-book accounting, will not provide the desired results for meeting target costs.

Moreover, non-functional research provided insights on the effects that these IOCM techniques may have on the parties and the relationship. It was highlighted that the introduction of e.g. VCA and target costing (Coad & Cullen, 2006; Mouritsen *et al.*, 2001) to the coordination of IORs may have apart from intended, also unintended effects that can influence not only the IOR, but also the internal organisation of the parties, e.g. their strategy, power distribution as well as their overall approach to IORs (e.g. Cuganesan & Lee, 2006; Mouritsen *et al.*, 2001). Other 'alternative' research viewed accounting controls as contributing a common language in IORs denoting, for example, what should count as acceptable performance (Sydow & Windeler, 1998). In this respect, IOCM techniques were seen as capable of serving the interests of groups of agents within and across organisations by providing the means for shaping and reproducing certain patterns of resource allocations, rewards and sanctions (Sydow & Windeler, 1998). Moreover, other non-functionalist studies of IOCM depicted its controls as outcomes of interactions, negotiations and translations aiming to achieve the subjective and often conflicting objectives of multiple agents or groups in a network (e.g. Chua & Mahama, 2007; Cuganesan & Lee, 2006; Mouritsen *et al.*, 2001).

Finally, another advancement of research in modes of IOCM is that it reported on cases where no new accounting techniques such as TCO, VCA and target costing were exercised. Instead hierarchical accounting controls such as budgeting, responsibility accounting and performance measurement and incentive rewards were adopted to achieve cooperation and mutual benefits (e.g. Håkansson & Lind, 2004; Tomkins, 2001).

This Section summarised achievements recorded in the literature so far, with the aims of suggesting opportunities for further research in the following Section.

2.5. Opportunities for further research

Caglio and Ditillo (2008) observed that a classification of research in a functionalist and non-functionalist stream helps to identify “whether there are inter-organisational contexts in which the roles of accounting have not yet been studied” (p. 879).

In this respect, the literature review highlighted that the majority of research has been informed by functionalist theoretical perspectives, which have been concerned with studying dyadic relationships, rather than networks (see Håkansson & Lind, 2007). Functionalist theories are more apt to the study of dyadic IORs, which they approach through providing prescriptive relationships between a strictly defined set of phenomena that are though isolated from the complex inter-organisational context from where these relationships of phenomena emerge (Chua & Mahama, 2007; Ryan *et al.*, 2002). Instead, non-functionalist theories are free of the computational difficulties facing functionalist approaches in modelling network ties and are, therefore, more suitable for studying networked IORs (Chua & Mahama, 2007; Ryan *et al.*, 2002). That is, non-functionalist theories are capable of capturing the impact of the inter-

organisational context, e.g. suppliers, customers and industry stakeholders, on the management of specific IORs (Caglio & Dittillo, 2008; Chua & Mahama, 2007; Håkansson & Lind, 2007; Kraus & Lind, 2007).

Drawing from the above, the purpose of this Section is to highlight those areas that implicate IOCM and control, but which have not yet been adequately studied. While research has extensively considered the implementation of modes of IOCM and control, *it has not provided detailed, in-situ accounts of organisational and inter-organisational forces facilitating or hindering their adoption and practice*. For example, research has not adequately considered *in-situ why* organisations establish certain IOCM and control mechanisms, *what* their intended or unintended effects are, and *what* is the role of organisation and industry characteristics to encourage or hinder choice of certain IOCM and control practices. In particular, research needs to examine *how* issues pertinent to an organisation's structure, e.g. issues of power and trust, its style of management as well as its control functions and accounting systems, influence its perspective of IOCM and control. Moreover, the role of issues pertinent to the inter-organisational context such as institutionalised industry practices and regulations need to be examined in terms of *how* they influence organisations' IOCM and control practices.

Issues of power and trust within an organisation's structure need to be examined in terms of how they are implicated in processes that influence its perception of IOCM and control. For example, research needs to further examine Coad and Cullen's (2006) assertion that what appears as trust underpinning practice of IOCM and control may in fact be a truce established and maintained by powerful individuals who seek to reconcile opposing interest groups in IORs. Further, more research is needed to assess Free's (2008) argument that "the stated goals and

ascribed trust-based benefits of category management maybe unrealistic in organizations that have their history and power relations steeped in hierarchical, autocratic and adversarial buyer-supplier relations”⁷ (p. 649). *A first theme, therefore, that warrants further research* is how processes of embedding trust or a dominating perspective *within* an organisation, through e.g. the management style of powerful individuals, previous experiences and routines, influence the modes of IOCM and control it enacts, i.e. formal and/or informal, accounting and/or non-accounting based, cooperative and/or competitive.

At the same time, while research indicated that collaborative IOCM and control may not be appropriate or even desirable under all circumstances, and emphasised that power asymmetries and dependencies determine its nature (e.g. Cäker, 2008; Cox, 1999, 2001, 2004; Donada & Nogatchewsky, 2006), it did not examine the processes that are involved in the reproduction or change of these asymmetries and the influences on IOCM and control thereto. In this respect, the calls of Caglio and Ditillo (2008) and Kraus and Lind (2007) for a network perspective in the study of IOCM and control encourages research to consider how industry practices as constituted by interrelationships between suppliers, customers and institutional bodies such as regulators implicate power relations and trust to influence modes of IOCM and control (e.g. Håkansson & Lind, 2004; Nicholson *et al.*, 2006). *A second theme, therefore, worthy of further research* is to consider the processes through which agents or groups of agents constituting industry practice implicate power asymmetries and trust in an organisation’s IORs, influencing its choice of IOCM and control modes, i.e. formal and/or informal, accounting and/or non-accounting based, cooperative and/or competitive.

⁷ Category management was presented by Free (2008) as a collaborative cost management approach, and for the purposes of this research it signifies any such approach.

Moreover, existing research, while it has suggested implicitly or explicitly that for less complex IORs, i.e. non-manufacturing ones, modes of IOCM and control are less relevant (e.g. Agndal & Nilsson, 2009; Cooper & Slagmulder, 2004; Cooper & Yoshikawa, 1994), it has not examined whether some of these modes can apply to such relationships as well. *A third theme worthy of further research, therefore*, is to investigate whether certain modes of IOCM and control are relevant for organisations “in the wider context of relationship building” (Agndal & Nilsson, 2009, p. 100) such as for reducing risk and further developing the relationship, rather than sharing cost data for specific projects.

Existing research has also argued that organisations need to have reliable internal accounting and information systems in order to successfully implement IOCM practices (e.g. Coad & Cullen, 2006; Dekker, 2003; Dekker & Goor, 2000; Kulmala *et al.*, 2002; Seal *et al.*, 1999). At the same time, it also indicated that there is no need for ‘new’ accounting techniques, i.e. other than those applied in the hierarchical organisation, before benefits from IORs can be accrued (e.g. Håkansson & Lind, 2004; Tomkins, 2001). Research, however, is still inconclusive on the potential relationship and effects that an organisation’s control functions and accounting systems may have on the nature of the IOCM and control practices it enacts as well as on the intended or unintended effects that these practices may have (e.g. Cuganesan & Lee, 2006; Mouritsen *et al.*, 2001). *A fourth theme worthy of further research, therefore*, is to investigate “the connections and interdependencies between internal and inter-organisational control processes” (Kraus & Lind, 2007, p. 292) in order to examine how they influence the nature of IOCM and control modes employed, i.e. formal and/or informal, accounting and/or non-

accounting based, cooperative and/or competitive, and the intended or unintended effects that these modes may have.

Finally, a review of the theoretical underpinnings of the literature revealed that there is relatively little research on the subject employing structuration theory (ST) (e.g. Free, 2008; Seal *et al.*, 2004; Sydow & Windeler, 1998). ST addresses by virtue of the duality of structure and its acknowledgement of dialectics of control, structural contradictions and purposive action the calls of Caglio and Ditillo (2008), Håkansson and Lind (2007), and Kraus and Lind (2007) for future research to examine processes of interaction and inter-dependence between interacting units, both intra- and inter-organisationally. It is argued that ST by virtue of its processual and dynamic approach can guide research on the themes identified previously, which refer to interplays between agents and multiple structures entailing the enactment of power and the negotiation of resources, cognition and legitimacy. However, a more detailed discussion of the relevance of ST to the purposes of this research is provided in Chapter 3.

In what follows, some concluding remarks are provided.

2.6. Recapitulation

This Chapter engaged with a review of the literature in the cost management and control of IORs with the aims of providing a comprehensive synthesis of the insights generated so far.

Firstly, it was suggested that recognition of the philosophical assumptions underpinning existing research is important in order to assess the nature, implications and limitations of its findings. For this reason, the literature was distinguished into a functionalist and non-functionalist stream and, thereafter, discussion moved to summarise the major functionalist and

non-functionalist theoretical approaches and their implications to research in IOCM and control. Moreover, the literature review suggested that functionalist research predominates and that it has mainly provided insights on dyadic IORs. On the other hand, relatively little research has been informed by non-functionalist theoretical frameworks. These frameworks were shown to offer a more holistic perspective on the implications of IOCM and control because they focus on processes and complex interrelationships among organisations, their sub-units and individuals who interact to manage interdependencies, communicate meanings, pursue interests, allocate resources and impose sanctions. Particularly for ST, it was argued that it can further contribute to the research of IOCM and control because of its potential to highlight the previously mentioned processes and complex interrelationships. A detailed discussion, however, of the potential of ST to inform this research as compared to the other non-functional frameworks is the subject of the following Chapter.

Following discussion of the theoretical approaches, the Chapter engaged with an overview of the literature by organising contributions according to the major modes of management control and IOCM. The modes for enacting management control referred to incomplete contracts, open-book accounting, performance measurement and reward systems, integrated information systems, informal controls as well as power and trust. Modes of inter-organisational control were shown to contribute to the overall management of IORs. They set the rules for coordinating the relationship, embody expectations and commitments, and provide the means for agreeing resource allocations and profit sharing patterns. Further, relational concepts and informal controls such as bonds of friendship, previous experience with the partner and issues of power and trust were shown to be important means of inter-organisational control that can support or hamper the

effectiveness of formal controls, while at other times to even substitute for such controls. On the other hand, modes of IOCM referred to VCA, TCO, target costing, PQF trade-offs and MCIs. Modes of IOCM were shown to coordinate inter-organisational activities along with management controls through measuring and recording costs and providing a forum to managers for achieving cost efficiencies.

Finally, the Chapter concluded with an overview of achievements of research to date and proceeded to suggest *four themes that warrant further research*. These themes supported the researcher's overall aim, which was to examine the organisational and inter-organisational forces that facilitate and/or hinder the adoption of cooperative cost management and control practices in IORs. These will be employed in Chapter 4 to generate research questions and in Chapter 5 to inform the coding scheme to undertake research evidence analysis. Chapter 3 in turn, discusses the reasons for employing ST to inform this research and proposes Stones' (2005) version of ST as a promising means for that purpose.

CHAPTER 3

THEORY AND METHODOLOGICAL CONCERNS

3.1. Introduction

This Chapter engages with the methodological underpinnings of the research. It develops the argument that management accounting research can benefit from ‘alternative’ or non-functional theoretical frameworks for “such approaches have assumed an important role in raising a number of significant and interesting disciplinary insights” (Baxter & Chua, 2003, p. 97).

As a development of the general overview of theoretical perspectives and frameworks presented in Chapter 2, this Chapter draws in Section 3.2 on arguments that question the incommensurability of research paradigms to advocate philosophical assumptions that dissolve dichotomies between the subjective and the objective, the deterministic and the voluntaristic, and the stable and the changing. In this respect, a structurationist perspective holds great potential, and the observation of Håkansson and Lind (2007) that there is relatively little research employing non-functional theoretical frameworks is employed to argue in favour of ST to guide the research (Giddens, 1979, 1984; Laughlin, 1995; Macintosh, 1994; Pozzebon, 2004; Ryan *et al.*, 2002).

The major objective of this Chapter is to argue in favour of employing ST, and more specifically of Robert Stones’ (2005) version of structuration, to theoretically inform this research and offer an alternative perspective to IOCM and control as compared to the insights provided by other ‘alternative’ frameworks such as ANT and the Industrial Network approach. This is discussed in Section 3.3. Then, Section 3.3 proceeds to present Stones’ framework and discuss its relevance to this research. This is achieved through considering the ways it has advanced ST and the research questions it is capable of addressing. Section 3.3 argues that the general questions arising from Stones’ framework provide a suitable basis for the investigation of IOCM and

control *in-situ*, where episodes of stability and change are articulated through processes of structuration.

Section 3.4 in turn, considers the calls of Humphrey and Scapens (1996) and others who have argued in favour of employing theoretical frameworks in a flexible manner to inform the research and interpret the research evidence⁸. Such a guiding approach to the use of theory is important because it allows scope for research empirics to feed back to the theory and suggest its refinement where necessary. Further, the arguments developed to justify the choice of theoretical framework in Sections 3.2 and 3.3, lead to a discussion in Section 3.5 of the philosophical assumptions underpinning this research. Discussion of the philosophical assumptions is important in order for the researcher to defend the relevance of his research (Hopper & Powell, 1985; Humphrey & Scapens, 1996). Finally, in Section 3.6 some concluding remarks are provided.

3.2. The argument for ‘alternative’ research in management accounting

Chapter 2 offered a review of the theoretical frameworks and the corresponding philosophical assumptions that have informed the literature on the cost management and control of IORs. In relation to this, Håkansson and Lind (2007, p. 894) observed that the majority of research has been informed by functional frameworks and that relatively little research has been undertaken from the perspective of non-functional theories such as ST, ANT and the Industrial Network

⁸ In this research, the use of the phrase ‘research evidence’ is preferred to the word ‘data’ because it is argued that the former better fits to the philosophical position this research embraces, and which is foreign to the functional connotations of objectivity and value-neutrality that the word ‘data’ conveys. ‘Research evidence’ is employed here to refer to any material that can help address the research questions of this research and which may emerge from both primary sources, e.g. personal observations, participation or presence in discussions or interviews, and secondary sources, e.g. various types of documents.

approach. This observation suggests that relatively little effort has been expended to explore the alternative insights that these theories may generate on the subject (Baxter & Chua, 2003).

The observation by Håkansson and Lind (2007) regarding the theoretical status of extant research, however, is surprising. This is because research in IOCM and control mainly appeared at academic journals from the late 90's, following the calls of Otley (1994) and Hopwood (1996) that gave impetus for extensive academic debate, extending discussions in late 70's and 80's, on the relevance of accounting research to provide theoretical explanations of accounting practice. The debate focused on the "failure of accounting research to question its methodological assumptions or to examine related broader and social issues" (Hopper & Powell, 1985, p. 455).

Hopper and Powell (1985) argued that the reason behind accounting research failing to question its philosophical assumptions arose from the domination of the 'functional' research stream, which appeared to offer what was needed, i.e. the development of accounting techniques and technologies useful to management. 'Functional' management accounting research, however, was found to lack theoretical capacity to provide explanations of irregularities and inconsistencies observed in accounting practice, and this was attributed to the "methodological assumptions underpinning orthodox work" (Hopper & Powell, 1985, p. 455; see also Ryan *et al.*, 2002), which ignored the potential contribution that close research studies of accounting in action could offer.

These arguments formed part of a debate that for accounting research to gain its relevance to accounting practice it was important for researchers to identify and comprehend the philosophical assumptions underpinning their theoretical approach and the values and beliefs they hold about the nature of the social sciences and society. This debate encouraged accounting

researchers to resort to social theory to elaborate issues of ontology, epistemology, human nature and methodology as well as on the regulation versus change of society. As a result, 'alternative' theoretical perspectives to the positivist stream were proposed and adopted in accounting research (Baxter & Chua, 2003, pp. 97-98). These perspectives that could be categorised under the interpretive, critical and postmodern traditions of social theory have contributed to a variety of rationalities in management accounting, highlighting the subjective, historical, multi-rational and context-dependent 'realities' of organisations (Child, 1997; Chua, 1986; Hopper & Powell, 1985; Hopper *et al.*, 1987; Hopwood, 1987; Laughlin, 1987, 1995; Morgan, 1988; Ryan *et al.*, 2002).

Unquestioned attachment to each of these traditions or paradigms, however, was challenged by a *relativist view* expressed by some organisation and social science theorists that questioned their exclusivity. Relativism suggests that epistemologies are inevitably limited and partial, temporal and fluid. So for example, Morgan (1988) argued that:

“human agency and the limitations imposed by perspective are fundamental in the generation of knowledge [...] Our lot as human beings dealing with a complex, multi-dimensional and paradoxical world, is that our knowledge can do no more than create a weak and rather uni-dimensional representation of that world” (p. 480).

Morgan (1988) argued that accounting research is largely *metaphorical*, suggesting that our understanding of its subject matter will be partial and limited depending on the metaphors employed (see also Humphrey & Scapens, 1996). Therefore, he argued that attachment to certain paradigms offers no more than a limited perspective on the subject. Moreover, he suggested that the problem of reconciling incommensurable research paradigms can be solved once recognising that organisations encompass many different dimensions and that their full understanding “requires that we find ways of integrating the many and often paradoxical insights that our

theories and explanations create” (Morgan, 1988, p. 479; see also Willmott, 1993). Besides, Laughlin (1995) also criticised paradigmatic research by recognising that “all empirical research is partial and incomplete and that theoretical and methodological choices are inevitably made whether appreciated or not” (p. 65).

The above arguments came to challenge the hegemony of the ontological tradition of positivism, which assumes that uniform and concrete knowledge is possible not only because society is viewed as objective and uninfluenced from interactions, conflicts and reconfigurations, but also because it possesses social structures that are stable and deterministic⁹. These arguments set the grounds for employing in research theoretical frameworks which allow for a synthesis of assumptions that are normally considered incommensurable, e.g. assumptions on subjectivity versus objectivity, structuralism versus action or stability versus change¹⁰. Such an example is Giddens (1979, 1984), who “challenged the premise of mutual exclusivity and assumed the duality of structure and action, proposing the *theory of structuration*” (Pozzebon, 2004, p. 249, emphasis in original). ST, however, received much criticism for its attempt to integrate traditionally opposing strands of social theory (Macintosh, 1994). For example, Laughlin (1995) saw Giddens’ attempt to integrate conflicting paradigms in his ST as “not an easy or obvious solution to the problem of choice” (p. 78).

⁹ Positivism, functionalism and structuralism are employed here as closely related ontological concepts accommodating philosophical positions that accept the external to our perception existence of the social world, its imposing and restricting nature on our capacity to act within it, and therefore, its ability to maintain homeostasis and ultimately stability.

¹⁰ As part of this debate Child (1997), for example, observed that there are researchers who whilst acknowledge the limited cognitive capacity of agents to perceive the world in its entirety, argue that paradigm incommensurability privileges positivist approaches and “severely limits the possibilities for theoretical development in organization studies. They look instead to the possibility of achieving a greater theoretical *synthesis* using the insights provided by different paradigms” (Child, 1997, p. 62, emphasis added; see also Knights, 1997; Macintosh, 1994; Reed, 1997).

Overall, the aim of this Section was to present the arguments constituting the aforementioned debate and to mention that it is surprising they had a small impact on the theoretical background of research in IOCM and control, which proliferated in a period¹¹ that followed the debate. In respect of the above, this research aims to advance an argument in favour of a structurationist framework to guide the research. This is because ST traverses traditionally incommensurable paradigms, and because of that, it holds promise for providing a fruitful medium to address the research opportunities identified in the concluding part of Chapter 2.

3.3. Why Structuration Theory?

The previous Section presented the arguments of various accounting, organisation and social researchers who argued that ‘alternative’ theoretical approaches that break paradigms, and which are compatible with research of accounting in action, should be employed in management accounting research. Such theoretical frameworks are *processual* in nature and, according to Ahrens and Chapman (2006), they promise theoretical achievement because:

“the processual analysis of accounting identifies processes through which specific accounting definitions are established in the field” (p. 831).

Processual theoretical approaches, therefore, recognise that the subjective, context-specific and multifaceted nature of management accounting requires *in-situ* studies that are capable of providing insights of accounting in-context and in action.

This part, however, shifts to address the following question: Why a ST framework is chosen to make a contribution to the existing body of the literature when, for example, ANT or

¹¹ The majority of the literature on the subject, as mentioned previously, emerged in the mid 90’s and proliferated in the 00’s.

the Industrial Network approach might be chosen instead? First, it is argued here that ST offers a more comprehensive approach than ANT or the Industrial Network theory, for it embraces an ontology that is more balanced between the structuralist and the interpretivist extremes. Second, it was shown in Chapter 2 that ST's potential in research into IOCM and control has not been fully explored, particularly following the recent refinements of the theory by Stones in (2005), and the debates his project gave rise to. It appears that little or no effort has been exerted to explore the potential insights that his framework on ST can offer to this branch of management accounting research. Third and most important, it is argued here that Stones' framework can contribute to this research with concepts, which are expected to facilitate analysis of the research context and its specificities.

In subsection 3.3.1, the first part of the argument in favour of a structurationist theoretical framework is further explained. The second and third parts of the argument follow, subsequently.

3.3.1. Why not Actor Network Theory or the Industrial Network Theory?

It was suggested previously that relatively little research to-date has investigated the cost management and control of IORs employing the 'alternative', i.e. non-positivist, insights promised by ANT, ST and the Industrial Network approach (Håkansson & Lind, 2007).

However, following analysis of these frameworks' potential to contribute to research, it is argued here that while ANT has contributed significantly (e.g. Chua & Mahama, 2007; Cuganesan & Lee, 2006; Mouritsen *et al.*, 2001; Mouritsen & Thrane, 2006) in highlighting the role of inter-organisational controls to 'act at a distance' (Alcouffe *et al.*, 2008, p. 3; see also Mouritsen *et al.*, 2001) within a network of heterogeneous actors, it lacks the capacity to

highlight the role of structures in enabling and constraining the activities of agents who produce and reproduce these structures. Jack and Kholeif (2007), when confronted the dilemma of using ANT instead of ST to interpret their research, concluded that choice of ANT over ST “lies in whether or not the researcher wishes to investigate the role of structure in the matter under investigation” (p. 209). According to Alcouffe et al. (2008), ANT is concerned with the process of management accounting change or innovation, i.e. with:

“the fabrication of management accounting technologies through the following of actor-networks. Unforeseeable interactions between human and nonhuman actors are central to this type of analysis. In this view, accounting innovations diffuse because they translate the changing and transitory interests of various groups of actors who are looking to maintain their position and influence within organizations and society.” (p. 2).

The above definition highlights the ontology of ANT as one that places prime attention to the power of agents, humans and non-humans, in changing their immediate context while it ignores the role of constraining or enabling forces in structuring actor-networks. For example, Alcouffe et al. (2008) observed that context “is inseparable from localized management actions and interactions within actor-networks” (p. 2), and that “both have to be analyzed simultaneously” (pp. 2-3). However, it is argued here that ANT does not provide the necessary concepts to capture this recursive relationship between context, as a structuring force, and actor-networks as a force constituting, reproducing or changing that context.

ANT adopts, similar to ST and Industrial Network theory, a processual perspective and focuses attention on understanding *how*:

“management control systems acquire their nature, existence and influence in the network. Management control is not regarded as a set of techniques, but instead is viewed as one element that influences heterogeneous actors within a network of embedded relationships” (Kraus & Lind, 2007, p. 289).

At the same time, the Industrial Network approach attempts to understand the implications on the management control of IORs posed by the interdependence of actors, which can change in a dynamic fashion (Håkansson & Lind, 2004; Tomkins, 2001). However, ANT and the Industrial Network approach adopt an ontological position that is restricted at the level of social construction, viewing 'reality' in IOCM and control only at the action level. These theories ignore the ontological possibility of agents pursuing their agendas under complex structures, which condition and at the same time are informed and reproduced by their actions. Moreover, such theories indeed concerned with social construction at the level of action, ignore that multiple levels of ontology may exist such as, for instance, an abstract ontology encompassing transsituational and time-spanning structures and a more concrete ontology of specific social practices at the level of *in-situ* interaction (Dillard *et al.*, 2004; Stones, 2005; Whittington, 1997/1992).

These theories, therefore, fail to view IOCM and control practices as outcomes of recursive interactions between agency and structure where cognition, normative expectations and power along with structural contradictions, path dependency, dialectics of control and co-evolutionary processes, contribute simultaneously through praxis in the production and reproduction of structures (Sydow & Windeler, 1997, 1998).

3.3.2. Structuration Theory and the potential of Stones (2005)

Drawing from the previous discussion, it is argued here that there is scope for ST to make a contribution to research in IOCM and control, although very few studies have done so, to date.

Seal et al. (2004) employed Giddens' ST to show how management accounting systems can be conceptualised as abstract systems helping to create trust and effect control of distant relationships. Free (2008) on the other hand, used ST to examine how a collaborative cost management approach was built upon discourses on trust, which it later destroyed as soon as it failed to deliver the promised benefits to the parties. Further, Sydow and Windeler (1997, 1998) employed ST to argue that notions of efficiency and effectiveness in the management of inter-firm networks can be explained through recursive interrelationships between praxis and structures of signification, legitimation and domination.

However, little use has been made to date of the capacity of ST to examine how issues of power and trust influence IOCM and control practices through interaction processes that involve agents or groups of agents positioned in a network; or how the internal agendas and control systems of organisations or the wider institutional context influence IOCM and control practices. Against the above opportunities, Stones' (2005) refinement of ST, which has been argued as "the most serious attempt to give structuration theory a new lease of life" (Parker, 2006, p. 122), is proposed to guide the research because it "provides an invaluable contribution to the ongoing debate around agency and structure and as such is likely to rekindle discussions around the wholesale utility of structuration theory" (Edwards, 2006, p. 913).

In relation to the above, and motivated from Jack and Kholeif (2007) and Coad and Herbert (2009) who employed Stones' version of ST to examine the role of management

accounting intra-organisationally, this research seeks to examine the theory's potential to contribute alternative insights on IOCM and control in line with the opportunities for further research identified in Chapter 2.

3.3.3. Why Stones' (2005) and not Giddens' Structuration Theory?

Robert Stones (2005) introduced his book titled 'Structuration theory' in Palgrave Macmillan, Basingstoke by writing:

"This book is intended, in part, as an introduction to structuration theory. At the same time it aims to provide a revised, stronger, framework for structuration theory" (p. 1).

He set to refine Giddens' ST through building on a synthesis of the criticisms¹² it has attracted. Such criticisms mainly focus on Giddens' conception of ST at a very abstract ontological level, one that Stones calls 'ontology in-general' as opposed to structuration directed towards the 'ontic'¹³ to address *in-situ*, substantive phenomena, i.e. what he calls 'ontology in-situ' (Edwards, 2006; Stones, 2005). According to Stones (2005), Giddens' version of the theory lacks consideration of epistemological and methodological issues that would render the theory directly applicable to specific contexts (Giddens, 1989; McLennan, 1984; Pozzebon & Pinsonneault, 2005), suggesting here the importance of a clear linkage between theory and empirics in theoretical development. In relation to the above, Stones observed:

"The absence of clear links to substantive circumstances meant that structuration theory was too free-floating [...] Giddens's treatment of the key concepts of structure and agency,

¹² Critics of Giddens' ST who Stones drew upon are Archer (1995), Cohen (1989), McLennan (1984), Mouzelis (1991) Sewell (1992), Shilling (1997) and Thompson (1989). Their work was employed by Stones in an attempt to synthesise their arguments with those of Giddens and, thereafter build his argument for a 'stronger' version of ST (see Stones, 2005, pp. 45-74).

¹³ Stones (2005) defined the 'ontic' and the purpose of ontology *in-situ* as "the level at which empirical evidence can be sought, and the purpose behind pointing the abstract ontology towards the ontic is, precisely, in order to encourage it to do more work at this substantive and empirical level" (p.76).

and of other related concepts such as time and space, was overwhelmingly at the abstract and generalising levels [...] He developed his notions of them in abstract terms so that the conceptual definitions he settled for would encompass all structures and all agents, the very nature of time and space” (2005, p. 7).

At the same time, though, it is perhaps unfair to criticise Giddens for his choice, as in his 1979 book he acknowledged that he did not originally intend to develop a theory of the particular but a theory of an abstract, generally applicable ontology. Giddens emphasised that ST can only be used as a sensitising device to guide empirical research or as helping to “provide an explication of the *logic* of research” (Stones, 2005, p. 3, emphasis in original), arguing that it cannot by its nature provide detailed guidelines as to the specifics of a research strategy. On the sensitising nature of ST, Macintosh and Scapens (1990) argued that “it is not a theory in the empiricist tradition, but an organized way of making *sense* of social life” (p. 469, emphasis added).

However, the above rationalisations on the aims of ST, did not address the particular concerns of Stones’ and others (e.g. Bauman, 1989; Bertilsson, 1984; Gregson, 1989; Pozzebon & Pinsonneault, 2005; Thrift, 1985) in respect of its abstract nature, something that formed the major argument in his defence of ‘strong’ ST. Stones argued that the concepts of ST:

“are said to be relevant to empirical research, but not in any way that can be spelt out in any detail. The abstract concepts *are said* to be tools to sensitise the researcher in a general, *unspecified*, way to the kinds of things she might find in the social world” (2005, p. 76, emphases added).

Stones’ project set out to address this issue by further developing Giddens’ concepts, such as the duality of structure, and the very notion of structure, together with neglected issues on epistemology and methodology (Edwards, 2006). To support his endeavours, Stones embraced Giddens’ (1984) concept of position-practice relations in an attempt to address what he saw as an

underdevelopment in the latter's work, namely: an overemphasis on action at the individual level and a neglect of the relationships between agents¹⁴ (Coad & Herbert, 2009; Jack & Kholeif, 2007; Thrift, 1996). In this respect, what distinguishes Stones' work from Giddens is that while the former also employed the 'agent-in-focus' (i.e. individual agent) as the unit of analysis for his 'strong' version of ST, he placed greater emphasis than Giddens on studying the duality of structure among a network of positioned agents-in-focus. In this way, he addressed neglected issues of epistemology and methodology by employing the *agent-in-focus* to understand the duality of structure *always* in relation to the influences, opportunities and constraints placed by other *agents-in-context* who constitute the web of position-practice relations.

Moreover, Stones argued that the concept of position-practice relations allows the examination, through what he called a 'composite study', of different agents-in-focus who can be approached as both first and third person, depending on the focus of the study at each specific phase. At this point, however, it should be clarified that while Stones employs more than one agents-in-focus, he does not explicitly state whether a *cluster or group* of positioned agents can be examined as *the* agent-in-focus to study processes of structuration in relation to other clusters of positioned agents-in-context. Still, however, Stones (2005) implicitly employs clusters of

¹⁴ Jack and Kholeif (2007) observed at this point that Stones' borrowing of the concept of position-practice relations from Cohen (1989) to establish the "missing institutional link" (Thrift, 1985, p. 618) between agency and structure by shifting ST's focus from individual action to consider "networks and relationships between clusters of agents within the delimited landscape" (Jack & Kholeif, 2007, p. 212) could give rise to arguments as to why this methodology should be used rather than ANT. They argued in this respect that ANT ignores the duality of structure and treats structures such as organisations, materials or ideas as networks of actors.

agents as the agent-in-focus in some of the illustrative case studies he makes reference to exemplify the operationalisation of his framework¹⁵.

Overall, Stones aimed at the ‘operationalisation’ of ST to sustain specific research projects through trying to answer “how structuration theory could be applied at the substantive level, how it could inform empirical analysis” (2005, p. 75). The answer to this question had to be found in repositioning the theory at a level where it would answer such questions as ‘who did what, where, when, how and why’ (Parker, 2006, p. 122). This endeavour, Stones argued, could be made possible if ST concepts were refined to be able to capture and transfer specific, *in-situ* ‘occurrences’ to knowledge of a ‘more or less’ generalisable nature, which though would still possess certain *in-situ* characteristics. On this matter, Edwards (2006), reviewing Stones observed: “the result is an approach that is question-led rather than simply concept-led” (p. 911), suggesting that Stones’ version of ST is capable of employing theoretical concepts in ways that can address specific questions at the level of the ‘ontic’.

To position ST at the level of the ‘ontic’, Stones developed a sliding, three level ontological scale which helped him in his ‘operationalisation project’ and the refinement of Giddens’ abstract concepts (see also Coad & Herbert, 2009; Jack & Kholeif, 2007). The meso-level ontology of the scale provides a bridge between the ontology at the level of the ‘ontic’, i.e. “the way that the abstract ontology looks when it is filled out and shaded in by the details and empirical evidence of actual social relations in particular times and places” (Stones, 2005, p. 77) and the abstract, all times and places ontology of Giddens. In this respect, Stones argued that a

¹⁵ Refer to Stones (2005) for the case studies of the Jewish community in the US and the efforts of the British Government to defend the Pound.

meso-level conception of ontology is capable of accounting for the *in-situ* variability of particular concrete entities and address specific questions (see also Edwards, 2006, p. 912).

Most importantly, Stones employed the meso-level ontology to extend Giddens' ST upon recognition that its core concept, i.e. the duality of structure, is too broad and abstract that cannot explain adequately the recursive processes of reproduction of social practices. Social practices, he argued, emerge from the hermeneutic-phenomenological capacities of agents who interpret theirs and others' actions and interactions in a web of position-practices where "the hinge between structure and agency" (Stones, 2005, p. 4) can be situated. Stones used Giddens' conception of structures as being both the *medium* and the *outcome* of agents' actions and went a step further to articulate the duality of structure by arguing that "there is a *complex and mediated connection* between what is *out*-there in the social world and what is *in*-here in the phenomenology of the mind and body of the agent" (2005, p. 5, emphases added).

However, as introduced above, this mediated connection takes place by agents who "must always be conceptualised as being caught up in the ebb and flow of position-practice relations" (Coad & Herbert, 2009, p. 179). Stones suggested that agents engage with purposive action and tacitly or discursively draw not only from their knowledge of interpretative schemes, power capacities and normative expectations, but also from their "action-informing interpretations" (Stones, 2005, p. 91) of how networked others have understood the three Giddensian structures. On the basis of the above, Stones set out to elaborate this 'complex and mediated connection' between agency and structure by dividing it into four analytically distinct but interdependent concepts, which he called the 'quadripartite nature of structuration', namely: external structures

as conditions of action, internal structures within the agent, active agency/agents' practices and outcomes.

In what follows, a presentation is provided of Stones' quadripartite model ¹⁶ (see Figure 3.1) with a view to consider how it has advanced ST in ways that also contribute to this research.

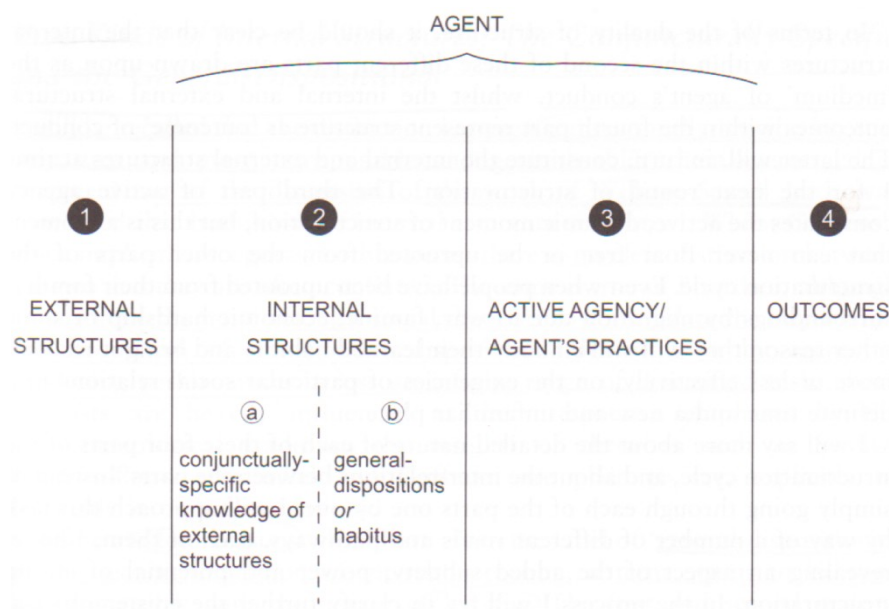


Figure 3.1: The Quadripartite nature of Structuration (adapted from Stones, 2005, p. 85)

Clarification of the framework should help to justify and support the philosophical positions underpinning the research and which advocate theories that may integrate what have been traditionally regarded as competing paradigms of social research in management accounting.

¹⁶ The phrases 'Stones version of ST', 'Stones (2005)', 'Stones' quadripartite framework', 'Stones' theory' or 'Stones' (2005) framework' are used interchangeably throughout the thesis to refer to Stones' refinement of ST in (2005).

3.3.4. Presentation of Stones' (2005) quadripartite framework

3.3.4.1. External structures

Stones developed Archer's conception of external structures and suggested that these involve the acknowledged and unacknowledged conditions that both enable and constrain action. He further argued that the unacknowledged part of external structures provides scope for *unintended consequences*. For Stones, external structures can be conceived of as position-practices and their networked relationships where other *in-situ* agents are involved in a duality of structure as is the agent(s)-in-focus. These 'networked others' (Thrift, 1996, p. 54) according to Stones, place conditions that exist autonomously from the agent(s)-in-focus and form the structural context of action.

In this respect, Stones' contributes additional insight to ST for he managed to integrate in the quadripartite model Giddens' emphasis on the agent's skilled and knowledgeable capacities to 'do otherwise' *with* a conceptualisation of external structures independently pressuring agents and autonomously pushing them around "either against their will or without them really understanding what is going on" (Stones, 2005, p. 109). In order for Stones to overcome criticisms that ST is overly voluntaristic and accommodate in his model both the external causal influences on agents, and their hermeneutic capacities to 'do otherwise', he developed two concepts, namely: *independent causal influences* and *irresistible causal forces*.

For Stones, external structures may take the form of independent causal influences when they are constituted, reproduced or changed entirely independently of the agent-in-focus and irrespective of his or her wishes. These structures have complete autonomy from the agent, even though they directly affect his or her life. On the other hand, irresistible causal forces refer to

those circumstances where the agent has the capacity to resist an external influence, but in phenomenological terms, feels unable to do so. Stones observed that this second conception of external structures comfortably accommodates both the *sui generis* autonomy of external structures from the agent-in-focus, and that their powerful influence on the agent is not independent of that agent's hermeneutic frame of meaning "with all of its wants, dispositions and ordering of concerns" (Stones, 2005, pp. 111-112). Stones concluded that in order for an agent to be able to resist the pressures of external forces he or she must have the adequate *power* to do so without endangering the resources necessary for the realisation of his or her agenda. Moreover, he or she should have adequate *knowledge* of relevant external structures, including alternative courses of action, as well as adequate *critical distance* in order to employ certain strategies in relation to the pressures that particular external structures place on his or her situation.

With regards to the empirical application of the framework, Jack and Kholeif (2007) suggested that the analytical separation between internal and external structures is not clear-cut unless the researcher delimits the action-horizons of the *in-situ* agents and then distinguishes what *they regard* as external and internal structures for the context of study. Further, Coad and Herbert (2009) argued that organisational boundaries do *not* necessarily delineate the line between external and internal structures. They observed at this point that while it can be assumed that structures situated outside the boundaries of an organisation, e.g. industry regulations and accounting regulations, can be treated as external, the distinction of internal versus external structures *within* an organisation is not clear-cut.

As a guide to overcome this difficulty, this research follows the suggestions of Coad and Herbert (2009) who proposed that the distinction between internal and external structures intra-

organisationally can be facilitated by identifying clusters of position-practices which are characterised by a consensus of their agents' action-informing schemas regarding the context of action. In practice, these clusters could refer to organisational departments or sub-groups of individuals who may refer to different departments.

3.3.4.2. Internal structures within the agent

As suggested previously, one of Stones' contributions to ST is that he further elaborated the way structures permeate agents and vice versa, i.e. the duality of structure. In this respect, he employed Archer's (1995) notion of external structures to make a distinction between internal structures, a distinction not made by Giddens (Stones, 2005, p. 58), and which, however, helps according to Stones, to illuminate the complex process of structuration *in-situ*. Stones argued that internal structures are virtual (2005, p. 87) and have distinct relationships to external structures, which he explicated through further distinction of the internal structures.

According to Parker (2006), what distinguishes Stones' work is "the conceptual elaboration of internal structures" (p. 129) between those that involve an agent's knowledge of the external structures constituting the specific context of action, i.e. conjuncturally-specific internal structures, and those that involve an agent's dispositions or habitus, i.e. general-dispositional internal structures. An agent's hermeneutic-phenomenological capacities, i.e. his or her knowledge about how to 'go on' in social interaction, involve resorting to both types of internal structures, which combined influence his or her theories of action. At this point, and before considering the general dispositional and conjuncturally-specific aspect of an agent's

internal structures, it is necessary to refer to degrees of omniscience and consciousness that are unintended.

Stones retained Giddens' (1979, 1984) position that agents resort to their stocks of knowledge, whether this is transposable or conjunctural, in ways that are direct, intense and purposeful or indirect and much more routine. Moreover, Stones concurred with Giddens that agents engage with a reflexive monitoring of the conditions and outcomes of their actions, which usually takes place tacitly or in a taken for granted manner. For example, while Stones recognised that "habitus itself can become the object of reflective and reflexive attention" (2005, p. 88), he suggested that it is usually applied and monitored by resorting to the *practical* level of agents' consciousness, meaning that when they draw on their general dispositional, they enact knowledge and evaluate outcomes unreflectively and unconsciously. This suggests that agents, when asked, will find it hard to provide verbal expressions to rationalise and justify their views and actions. In contrast, when agents can verbally express their knowledge about their faced social conditions and interactions with other agents, they rely on the *discursive* level of their consciousness.

The above points make a useful contribution with regards to the 'operationalisation' of agents' internal structures. On this matter, Coad and Herbert (2009) cautioned researchers to consider the implications of the inability of agents to articulate tacit aspects of consciousness as they interpret research evidence. For them, researchers "must acknowledge the potential for agents (often unintentionally) to describe their actions and motivations in ways that are contrary to observed evidence" (ibid, p. 182, parenthesis in original). This caveat should be remembered when also considering that *practical consciousness* is the most prevalent form through which agents express and evaluate their knowledgeability. However, Coad and Herbert (2009)

suggested that a provisional sense of agents' or groups of agents' dispositions and conjuncturally-specific knowledge can be found in *discursive* elements. These elements for the general dispositional can take the form of *broad ideological schemas*, whereas for the conjuncturally-specific can take the form of the *three Giddensian structures*, i.e. knowledge of interpretative schemes, power capacities and normative expectations, and the way these are understood by the other relevant agents-in-context.

In relation to the above, and in order to mediate the potentially misleading effects that agents' discursive accounts may have on the interpretation of research evidence, Stones (2005) argued that it is important for the researcher to consider his personal observations (see pp. 124-125) of the *practices* involved, and perhaps rely on other sources of evidence such as various documents that can proxy agents' *praxis* and its outcomes. This process of *method triangulation* can help to highlight any discrepancies between what the agents articulate in their discursive accounts and what they actually do.

In what follows, further attention is placed on clarifying the general dispositional and conjuncturally-specific internal structures as well as on practical issues that refer to their identification during the interpretation of the research evidence.

- The general dispositional

To conceptualise the general dispositional, Stones drew from Bourdieu's notion of *habitus*, which comprises such things as transposable skills and dispositions, including generalised world-views and cultural schemas, typified recipes of action and habits of speech and gesture (Stones, 2005, p. 88). Stones used *habitus* interchangeably with 'general dispositional' to emphasise not only the implications for action that *habitus* underlines, where the agent "produces performances across an

infinite range of diversified tasks” (2005, p. 87), but also the interpretation of external structures that refer to transposable knowledge of “a general world view incorporating dimensions of culture as discourse” (2005, p. 87). This transposable knowledge contrasts with positional knowledge, i.e. “with the more contextualised knowledge of particular conditions of action indicated by conjuncturally-‘specific’ structures” (2005, p. 87).

To identify agents’ general dispositions the researcher should focus on identifying those *verbal expressions* that evoke the values and moral codes as well as the principles of action that are deeply ingrained in people’s consciousness (Coad & Herbert, 2009; Jack & Kholeif, 2007). These should demonstrate their *aspirations*, *objectives* or *expectations* with regards to e.g. the way cost management and control is enacted and IORs are coordinated. These discursive views may differ between clusters of position-practices that could represent an organisational department or an informal clan of agents-in-focus involved in different departments or organisations.

- Conjuncturally-specific internal structures

This aspect of the agent’s internal structures acts as a link between his or her hermeneutic-phenomenological capacities and the external structures (Parker, 2006, p. 129). Therefore:

“although transposable capacities and dispositions will be involved in apprehending and reacting to conjunctural specificities, the details of the latter are not themselves transposable and generalised. They have contours, shapes and textures whose specificity within time and place is of great import to the agent facing those external structures” (Stones, 2005, p. 90).

Conjuncturally-specific internal structures refer to an agent’s role or position and comprise knowledge of the three Giddensian structures, i.e. knowledge of interpretative schemes, power capacities and normative expectations emerging from that position. To perceive agency as

occupying certain roles or positions allows examination of the agent's hermeneutic-phenomenological capacities from within a web of position-practices. Position-practice relations approach the interface between the agent's knowledge and his or her understanding of the structures, i.e. the conditions of action, constituting his or her position as mediated by the way 'networked others' are likely to interpret his or her undertaking of the three Giddensian structures. At this point, Stones underlined that there is an *inner temporality* within the agent-in-focus' 'knowing' about what the agents-in-context are likely to do (Stones, 2005, p. 92). This suggests that the agent-in-focus *predicts* what the agents-in-context might do in a situated future by drawing on his or her interpretations of what he or she has been and what he or she has done in the past.

Conjuncturally-specific internal structures framed within a web of position-practice relations contribute in this research an understanding of the agent-in-focus' appreciation of the possibilities, opportunities, constraints and obligations within which the cost management and control of IORs is enacted.

3.3.4.3. Active agency

Active agency is concerned with how agents act, drawing routinely or at times strategically from their internal structures. This is the "active, dynamic moment of structuration" (Stones, 2005, p. 86), which highlights the way conjuncturally-specific internal structures provide a pivot between external structures and routinely-embedded dispositions (Coad & Herbert, 2009).

At this point, Stones articulated the dynamism inherent in agents' conduct by drawing on five aspects of active agency, which collectively underline that "the 'doing' of action or

interaction in a particular time and place is not reducible to the virtual, latent, perspectives, conjunctural-knowledge, dispositions and capabilities of the internal structures” (Stones, 2005, p. 101). He emphasised that consideration of the *horizon of action* of the agent-in-focus is of central significance, as it determines the ‘contexts of relevance’, which in turn influence what aspects of the internal structures will be employed to inform interaction. Further, Stones drew attention to the *possibility of creativity, improvisation and innovation* within an agent’s conduct that can materialise as the agent responds to the exigencies posed by the specific context. It is the specific combination of skills, principles, habits and other dispositional knowledge that the agent deploys in the interaction process to deal with the perceived demands of the conjuncture, which can give place to “moments of openness, indeterminacy and uncertainty that can never be eliminated by pre-given conceptions of what is supposed to happen” (Stones, 2005, p. 102).

Moreover, Stones recognised the influence of the *unconscious* on the agent’s conduct and argued that it may have an autonomous effect on the way internal structures are drawn upon by agents in their production of practice. Further, Stones, drawing from Mouzelis, stressed agents’ ability to possess varying levels of *critical distance* from their internal structures, suggesting here another point of the dynamism and potential for change inherent in active agency. Combined assumptions about the role of the unconscious in implicating a complex and internally conflictual picture of the agents along with their capacity to reflexively monitor and critically reflect on their internal structures, indicates a further aspect of active agency emphasised by Stones, and which refers to their *rationalisation of action*¹⁷. The rationalisation of action refers to agents’ need to sort out priorities or concerns and order *their* projects to deal with a plurality of exigencies posed

¹⁷ Stones (2005) drew from Giddens (1976) and Archer (2000, 2004) to put forward this part of his argument.

by possibly conflicting projects pursued by other positioned agents constituting the structural context.

Consideration of the impact that the unconscious may have on agents' conduct, along with the more or less taken-for-granted or critically reflective capabilities of agents, suggests that the 'rationalisation' and ordering of their projects against a plurality of structures may or may not be harmonious, indicating here "inner conflict of varying degrees of intensity and with varying degrees of potential compromise" (Stones, 2005, p. 103). The plurality inherent in the context of action, in turn, suggests that the exigencies it poses to the agents-in-focus' ordering of projects or concerns is interpreted by resort to their internal structures, which also reflect that plurality. Agents 'assess' that plurality and prioritise their projects by subjecting their internal structures to a process of *hybridisation* where only those aspects that are critical to the immanent horizon of action are brought to the forefront leaving the other in the background, dormant (Stones, 2005, pp. 103-104).

Active agency, thus, involves all those dynamic elements that illuminate how the process of structuration unfolds leading to the *reproduction* or *change* of the agents'-in-focus practices, which comprise the outcomes of the structuration cycle.

3.3.4.4. Outcomes

The outcomes of active agency refer to how agents' practices influence existing structures both internal and external. Such practices may either routinely reproduce or change these structures. Further, outcomes may also comprise the success or otherwise of agents' purposes regardless of

their effect upon structures. Stones (2005) concluded at this point that the “structural context can serve to either facilitate or frustrate agents’ purposes” (p. 85).

For example, outcomes may involve the potential influences of IOCM and control practices to an organisation’s internal management control systems and agendas. Outcomes intended or not, are approached by reference to the discursive accounts of the agents-in-focus. Triangulation of these accounts, however, with observations of agents’ praxis and analysis of document evidence can be employed to deal with the concern of agents often unintentionally describing their actions and achievements in ways that are contrary to observed evidence (see Coad & Herbert, 2009, p. 182).

Figure 3.2 summarises the main aspects of Stones’ framework, where structuration processes materialise among interacting agents who occupy certain positions in a web of position-practice relations. In this way, action and outcomes, essential aspects of the quadripartite framework, are not approached from the perspective of a single agent. Instead, “the agents-in-focus should always be conceptualised from the start as being in the midst of, as already being caught up in the flow of, position-practices and their relations” (Stones, 2005, p. 93). This suggests that active agency and outcomes emerge from the action-informing conclusions of the agent(s)-in-focus, who always have to consider the actions and interpretations of immediate and more distant position-practices that collectively form the external structures to these agents.

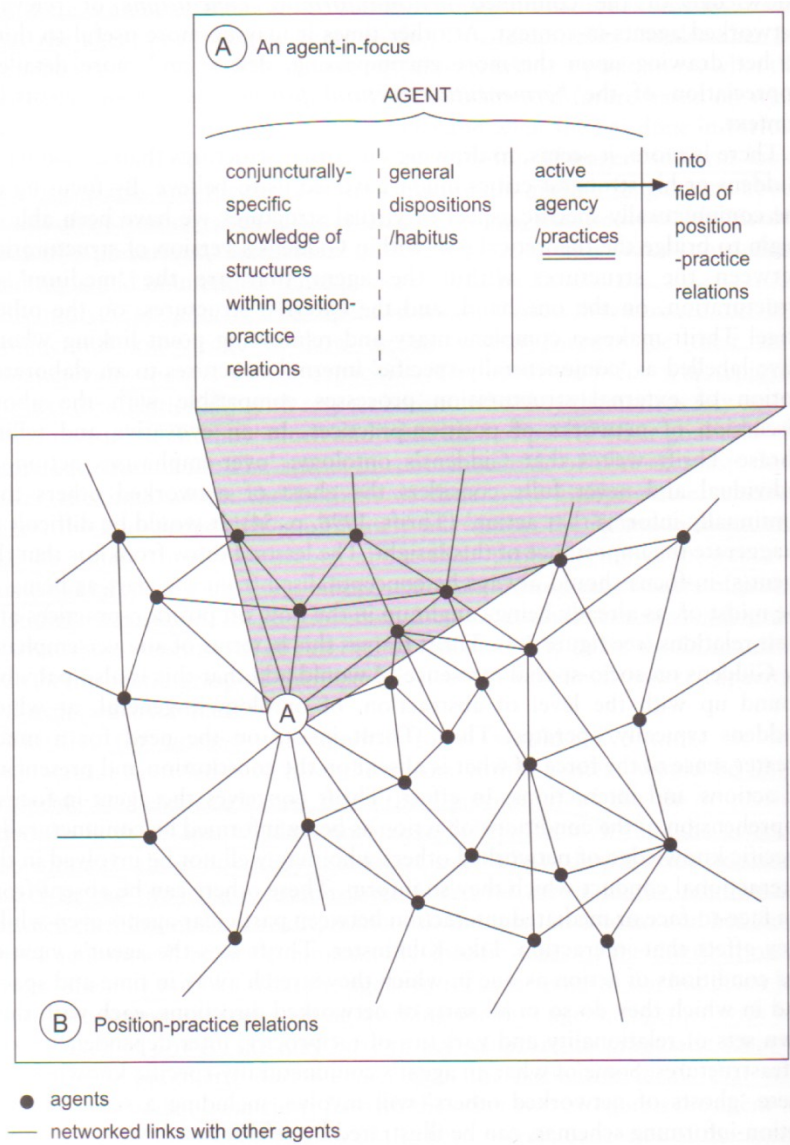


Figure 3.2: Agent-in-focus within a field of position-practice relations (adapted from Stones, 2005, p. 94)

3.3.5. Stones' (2005) quadripartite framework and methodological bracketing

Following the presentation of the ontological concepts constituting Stones' quadripartite model, it is appropriate at this point to refer to his use of methodological brackets that help researchers *delimit their focus* and get a clearer understanding about the significance of "any piece of

empirical research cited in support of a claim about the object of study” (2005, p. 121). Stones recommended using a form of bracketing, which is different to that originally proposed by Giddens, i.e. ‘institutional analysis’ and ‘strategic conduct analysis’. Instead, Stones proposed using *agent’s context analysis* and *agent’s conduct analysis* as an alternative form of brackets that “provide means whereby particular questions, or objects of investigation, and the more or less distinct ontological insights of structuration are brought together and considered in relation to questions of empirical evidence” (2005, p. 123).

It is important to make clear here that Stones’ two methodological brackets express nothing more than a grouping of the quadripartite cycle of structuration in a way that both brackets’ analyses articulate the duality of context (structure) with conduct (action). ‘Agent’s context analysis’ should be employed as a means to analyse the terrain of action and the range of strategic possibilities facing an agent-in-focus in terms of rights and obligations, interdependencies and power asymmetries. This should be approached through the agent’s conjuncturally-specific knowledge of his or her context of action that also includes action-informing conclusions of how networked others interpret that context. On the other hand, agent’s conduct analysis directs the researcher to investigate agents’ practices, reflexive monitoring, ordering of projects as well as intended and unintended consequences.

For Stones, “all of the questions or question-types falling within the remit of structuration theory require one or both forms of methodological bracketing” (2005, p. 120). In what follows, an overview is provided of the basic contributions of Stones’ framework to ST, while considering at the same time how these facilitate the undertaking of the research.

3.3.6. Stones' (2005) relevance to undertaking the research

Drawing from the above discussion, it is concluded that Stones' version of ST aims to provide a bridge between the all-encompassing abstract theoretical concepts of Giddens (1979, 1984) and the specific empirics of a particular research project. In this respect, Parker (2006) observed that Stones' strategy for revitalising ST is predominantly [...]

“to restrict its scope in order to enable it to become a powerful guide to empirical research, enabling the abstract and the particular to be related” (p. 127).

This linkage between the abstract and the particular is achieved through positioning and analysing the quadripartite nature of structuration from within “position-practices and their relations [...that can] provide an invaluable meso-framework within which to situate individual concrete level studies of structuration” (Stones, 2005, p. 75, parenthesis added). For Parker, Stones' ideal reader should be someone setting about some research that focuses “on phenomena produced by structurally situated actors, exercising powers of agency, by deploying their knowledge of structures” (2006, p. 126).

For the purposes of this research, Stones' version of ST offers concepts that can help bracket and delimit what is important and up to where the focus of investigation should extend. For example, the concept of position-practices and their relations, which Stones (2005) and Cohen (1989) borrowed from Giddens (1984), provides a contextualising frame, as it helps determine what are the structures, what are the conditions and mediums of action, and therefore, what is the scope for change emerging through purposive action or unintended consequences. Moreover, position-practices in conjunction with the distinction of internal and external structures contribute to the way certain practices come to be as they are.

For example, Kraus and Lind (2007) argued that little research has contributed to understanding how interest groups are formed and interact in IORs, and how inter-organisational controls can be applied. Position-practice relations and the distinction of the hermeneutic-phenomenological capacities of agents in terms of general dispositions and conjunctural knowledge can provide here insights on the divergent and often irreconcilable goals that agents pursue in a web of relations between sub-units within and across organisational boundaries. Further, the role of networked others, e.g. regulatory bodies, who are not present at the context of interaction but who influence the nature of IORs and their controls can be examined from the network approach that position-practices introduce to ST.

Moreover, the calls of Caglio and Ditillo (2008) and Free (2008) that more research is needed on how modes of IOCM and control operate in practice and how they implicate trusting IORs or alternatively power-based cooperation (Cox, 1999, 2001, 2004), can be approached by Stones' distinction of internal structures. Such distinction offers, for example, the opportunity to examine how deeply ingrained dispositions of the agent-in-focus for trust or power-based relations influence the nature of the pursued IORs and the management controls enacted thereto. At the same time, the concept of conjuncturally-specific internal structures allows examination of how the above dispositions can prevail or be compromised against the exigencies, opportunities, and constraints posed by the circumstances of the specific context of action. Further, the distinction between independent causal influences and irresistible causal forces that condition the hermeneutic-phenomenological perception of the external structures provides the concepts to rationalise why certain practices that are recognised by agents as 'inefficient' persist over time.

There follows a presentation of general questions emerging from the foregoing discussion of Stones' version of ST that should be capable of guiding the researcher to derive insights into 'who did what, where, when, how and why' (Parker, 2006, p. 122) in respect of IORs and their cost management and control. These questions provided a skeleton that guided the researcher towards constructing more specific questions "on a restricted number of germane points" (Stones, 2005, p. 82) that "will elicit from the subjects, from documentation and from observations their knowledge of themselves, their context and their boundaries" (Jack & Kholeif, 2007, p. 216).

3.3.7. Question-types to guide research following Stones (2005)

The following general questions were used to guide the development of more specific questions to use in semi-structured interviews, and further to guide interpretation of observations and document evidence.

1. What are the salient external structures, and how do these influence the phenomenology, hermeneutics and practices of the agent-in-focus in respect of IORs and their cost management and control?
2. What are the general dispositions of an agent-in-focus towards IORs and their cost management and control?
3. What are the salient conjuncturally-specific internal structures of an agent-in-focus in respect of IORs and their cost management and control?
4. What are the practices of an agent-in-focus in respect of the cost management and control of IORs?
5. What are the outcomes from the cost management and control of IORs, such as intended consequences, unintended consequences, contradictions within and between structures and with practices?
6. Looking to the past, how have questions 1 to 5 changed over time?

7. Looking to the future, how will 1 to 5 change over time?

These questions aim to contribute to an account of the structuration of IOCM and control, and therefore, offer the opportunity to explore the potential of Stones' version of ST to contribute thereto. Furthermore, the interpretation and analysis of the research evidence was separated between *agents' context analysis*, comprising the external structures of agents, and *agent's conducts analysis*, comprising evidence of internal dispositions, conjuncturally-specific structures and praxis.

3.4. Stones (2005) and a skeletal approach to empirical investigation

The early sections of this chapter have been concerned with arguments against paradigm exclusivities and have suggested that the methodology of this research sympathises with approaches that traverse traditionally incommensurable streams of social theory. In line with this philosophical choice, it is suggested here that the research methodology will be applied in a manner which is not restrictive, deterministic or dogmatic.

This methodological position was inspired by Humphrey and Scapens (1996), who argued that reliance on a single social theorist poses significant implications for field-based accounting research particularly in terms of ontological and epistemological assumptions. They noted in this respect that:

“the reliance placed on a single social theorist in many accounting papers is felt to privilege a particular body of knowledge excessively, especially in the light of contemporary notions of relativism and the emerging view that knowledge claims should be seen as temporal and fluid” (Humphrey & Scapens, 1996, p. 88).

Humphrey and Scapens cautioned that to give primacy to a particular theory impedes theory generation and extension, because empirical data are not given the necessary scope to contribute

alternative insights that may modify or disconfirm the theories. Data are there simply to confirm the theory (see also Ahrens & Chapman, 2006; Vaivio, 2007). They concluded that if theoretical development through field research is to take place, then researchers need to use theories *metaphorically* to allow sufficient flexibility for the empirical data to modify, contradict or confirm the theoretical framework(s) employed. This position is similar to that of Laughlin (1995) and Broadbent and Laughlin (1997) where they used the relationship between skeleton and flesh as a metaphor to denote that theory should depend on empirical evidence if a meaningful whole is to be formed (see also Berry & Otley, 2004).

It is in this way that this research aims to employ Stones' framework to *guide* and interpret research evidence. It is argued that such an approach to the application of the framework will provide scope for it to be challenged and revised as a result of the research process. In this respect, Jack and Kholeif (2007) argued that Stones' version of ST is in sympathy with calls for flexibility, because "what is being offered in the strong structuration framework is an approach (not a prescription) for carrying out field work that envelopes data, theory and research problems" (p. 220, parenthesis in original). They argued that although one theory is applied, i.e. Stones' version of ST, it is a complex and many-layered theory. Additionally, Ahrens and Chapman (2006), in agreement with Humphrey and Scapens (1996), severely criticised qualitative field studies, which conclude that a particular social theory is simply applicable to accounting. For them, what is required is for researchers to delineate in what specific way the social theory advances our understanding of management accounting and suggest ways of revising the theory to address future research problems.

3.5. An overview of the philosophical assumptions underpinning the research

Before embarking to consider more practical aspects of research methodology in the following Chapter, it is important to clarify the philosophical assumptions underpinning this research and which reflect the choice of theoretical framework and the previously mentioned position on the relationship between theory and empirics.

The ontological assumption embraced here, broadly reflects that of ‘alternative’ research perspectives, i.e. that social reality whilst appearing objective is subjectively and contextually constructed (see Chua, 1986, p. 620). This assumption suggests an epistemology, which assesses assertions of truth in-context, where phenomena develop their properties and identities (Hodgson, 1993; Hopwood, 1987). At this point, Ahrens and Chapman (2006) suggested that this “particular way of knowing the field” (p. 819) is what distinguishes qualitative from positivistic research. That is, qualitative researchers approach the field as an *emergent social* reality and are not simply interested to “*describe or clarify* it to the reader as if part of a given nature” (ibid, p. 819-120, *emphases in original*). In support of this relative ontology, Humphrey and Scapens (1996) observed:

“Accepting that empirical data and philosophical argument cannot provide objective answers (only answers which are based on particular assumptions, beliefs, value judgements, etc.) means that we have to be conscious of and prepared to debate and defend the assumptions, beliefs and value judgements we use in addressing research questions and in making knowledge claims” (p. 93, *parenthesis in original*).

This research is also informed by a social constructivist position where the focus of study is the processes out of which human beings construct and reconstruct social structures and practices (Bryman & Bell, 2003; Chua, 1986; Mason, 2002; Ryan *et al.*, 2002). For Van Maanen (1998), “attempts to link agency to structure through accounts based on the study of events (routine or

otherwise) over time” (pp. x-xi, parenthesis in original) provide a major principle guiding much *qualitative work*, and therefore, ST and Stones’ version of ST can facilitate such attempts in research¹⁸.

Any conception of reality for this research has temporal, spatial and historically constrained dimensions, i.e. reality is relative to specific points in time and space, and influenced by the past. Temporality suggests that what may constitute valid knowledge at a certain point in time with regards to e.g. the purpose of management accounting controls in a supplier relationship, may not hold at a different point in time. Moreover, consideration of space and history acknowledges that ‘reality’ and knowledge of that ‘reality’ are influenced by the specific context where the phenomenon is situated, e.g. a specific organisation or industry, and also by the different ways the phenomenon came to be as it is. For example, collaborative accounting controls for IORs may be encouraged in a car manufacturing organisation in Japan due perhaps to a collective, binding and trusting organisational and national culture prevailing there. However, this collective and cooperative spirit may not hold value for a shipping organisation in Greece where individualism, paternalism, tendency for independence and distrust may characterise the organisational and national culture. The implications of the above positions suggest that only theoretical understandings of a specific phenomenon are possible and not statistical generalisations (Berry & Otley, 2004; Humphrey & Scapens, 1996).

The philosophical assumptions underpinning this research, therefore, borrow from both interpretive and critical streams of social theory. The mutual exclusivity of research paradigms

¹⁸On the ontological affinity of ST to social constructivism, Pozzebun (2004) argued that researchers “ascribing to a nominalist or constructivist ontology should find ST more appealing” (p. 251).

has been criticised¹⁹, and for this research a philosophical position favouring a combination of what were traditionally thought of as conflicting streams of social theory reflects a perspective, which posits that there is no such thing as dichotomies between the subjective and the objective, the deterministic and the voluntaristic or the stable and the radical. It has been argued in this Chapter that ST embraces such non-dichotomist logic.

3.6. Recapitulation

This Chapter introduced an argument for employing a structurationist theoretical framework to guide the research and the interpretation of the research evidence. Particularly, the argument was made for ST and its recent refinement by Robert Stones in 2005.

This argument was based on criticisms expressed by some social, accounting and organisation theorists, which aimed to encourage research to draw from theories that cross paradigms and which are non-deterministic. Moreover, the literature review in Chapter 2 concluded that there is little research to-date drawing from what Baxter and Chua (2003) identified as ‘alternative’ theoretical frameworks in management accounting research and which promise a number of interesting insights into the discipline. Such alternative theories are ANT, ST and Industrial Network theory.

Furthermore, the choice for ST, and more specifically of Stones’ version, was based upon a three-fold argument. First, it was argued that ANT and the Industrial Network theory cannot

¹⁹ The seminal work of Burrell and Morgan (1979) who classified social research into paradigms and its extension to accounting research by Hopper and Powell (1985) and Chua (1986), was criticised for imposing into research dichotomies and incommensurabilities that are too crude to adequately capture the multifaceted nature of social reality and the research requirements it poses (Pozzebon, 2004; Ryan *et al.*, 2002; Willmott, 1993). Indeed, Hopper and Powell (1985) cautioned accounting researchers that while “such a classification is useful for indicating the nature and range of alternative approaches, it would be wrong to claim that all accounting research can be neatly classified into one of these categories” (p. 430-431).

capture the role that abstract or ‘concrete’ structures play in the constitution of society and that these structures are the outcome of agency. Second, the literature review in Chapter 2 revealed that whilst there is some research undertaken from an ANT and industrial network perspective (Chua & Mahama, 2007; Cuganesan & Lee, 2006; Håkansson & Lind, 2004; Mouritsen *et al.*, 2001; Mouritsen & Thrane, 2006; Tomkins, 2001), there is very little research exploring the potential of ST (Free, 2008; Seal *et al.*, 2004; Sydow & Windeler, 1998) in the field of IOCM and control. Third, it was argued that the improvements Stones introduced to ST in the form of the quadripartite model and the concept of position-practice relations offer a promising framework that can contribute to this research.

Additionally, the chapter presented examples of general research questions derived from Stones’ framework and went on to argue in favour of a flexible use of the theory in the research. Finally, and in accordance with the calls of Hopper and Powell (1985), Chua (1986) and Humphrey and Scapens (1996), the philosophical assumptions underpinning this research were presented to support the choice made for ST to guide the research.

CHAPTER 4

THE CASE STUDY SITE, RESEARCH DESIGN AND METHODS

4.1. Introduction

The previous Chapter argued in favour of a structurationist perspective in the research of the cost management and control of IORs. This Chapter engages with issues involved prior to undertaking the research. These include the choice of research strategy, the presentation of the industry, the selection of the case organisation and the presentation of its profile along with issues of access, the formulation of research questions, and finally the selection of appropriate methods. Attention, therefore, is also placed to the more technical aspects of the research, a discussion of which follows after arguing in favour of the case study as a research strategy and discussing the reasons behind the selection of the case organisation and industry.

The research process was articulated through a case study guide or protocol (Yin, 2003) that comprised description of the case organisation's profile, the research questions, the research evidence collection methods, and the procedures for analysing and interpreting that evidence²⁰. The guide enhanced the *procedural reliability* of the case analysis, which along with *contextual validity*, are major criteria for grounding the research process and findings (Ryan *et al.*, 2002). At this point it should be noted, however, that the procedures followed to analyse research evidence and the measures taken to ensure the grounding of the research process and findings are discussed in the next Chapter, which further considers some issues that emerged during the undertaking of the research and which influenced the research process.

The Chapter is structured as follows. Section 4.2 introduces the case study as an appropriate approach for the purposes of this research, while Section 4.3 introduces the industry and the case organisation, including the reasons behind their selection. Then, Section 4.4 presents

²⁰ To view the case study guide, refer to the Appendix.

the research questions. Following this, Section 4.5 discusses the methods of research evidence collection and presents a loosely-structured interview guide that articulates the research questions with the theoretical insights provided by Stones' version of ST. Finally, Section 4.6 provides some concluding remarks.

4.2. The argument for a case study approach in management accounting research

In Chapter 3, a debate that originated in late 70's and 80's was introduced, in which a number of academic papers expressed caution regarding the status of management accounting research, and advocated that research should attempt to understand and provide theoretical explanations of accounting practice (Burrell & Morgan, 1979; Chua, 1986; Hopper & Powell, 1985; Hopper *et al.*, 1987; Hopwood, 1987).

The dissonance between research and practice was attributed to the dominance of the 'functional' approach and the limited adoption in research of 'alternative' theoretical approaches, which are more conducive to *in-situ* studies of accounting in action. The introduction of such anti-positivist theoretical perspectives in management accounting (Baxter & Chua, 2003) met the calls of accounting scholars for research which investigates accounting in action and in-context where the *processes* out of which accounting becomes what it is can be studied (Hopper & Powell, 1985; Hopwood, 1987; Kaplan, 1984). As a means of pursuing processual research, accounting scholars advocated the use of case studies because they support the adoption of the 'alternative' theoretical approaches discussed in Chapter 3. In this respect, Berry and Otley (2004) argued that revisiting [...]

“the methodological underpinnings of accounting research are an important starting point for consideration of case-based research” (pp. 231-232).

The case study, therefore, was introduced as a promising research strategy for developing theoretical explanations of accounting practice through using theory to guide the research (Berry & Otley, 2004; Humphrey & Scapens, 1996).

Berry and Otley (2004) emphasised the contribution of theory in case studies by stressing that the [...]

“output of qualitative research is essentially theoretical and particular which may have face validity and which may be of very limited generalisability to other settings” (p. 243; see also Ahrens & Chapman, 2006).

As discussed in Chapter 3, Stones’ version of ST is conducive to the collection and interpretation of research evidence with the aim of understanding and explaining the *in-situ*, rather than the abstract and generally valid. This relationship between theory and case study output is in accord with the philosophical assumptions underpinning this research, and supports the choice made of Stones’ version of ST²¹. Moreover, Humphrey and Scapens (1996) argued that the use of theory to interpret the case reflects certain ontological and epistemological predispositions and that for case-based research in accounting, *interpretation* is necessary to provide convincing theoretical explanations. On this matter, Berry and Otley (2004) argued that [...]

“[i]t is rather the giving of new meanings by interpreting events and data through (or perhaps into) a theoretical frame, which provides insight to the actors in the field as well as to the researchers” (p. 244, parenthesis in original).

On the basis of the above, it is argued here that the case study is the appropriate research strategy for this research, because it [...]

²¹ To review the philosophical assumptions underpinning this research and their relationship with the choice of Stones’ version of ST, refer to Chapter 3, Section 3.5, pp. 128-130.

“investigates a contemporary phenomenon within its real-life context, especially when the boundaries between the phenomenon and context are not clearly evident” (Yin, 2003, p. 13).

In particular, the *explanatory case study* can provide the methodological means for deploying Stones’ version of ST because this type of study is designed to “generate theories which provide good explanations of the case” (Ryan *et al.*, 2002, p. 144) through addressing research questions that “attempt to explain the reasons for observed accounting practices” (Scapens, 2004, p. 260). The role of theory in explanatory case studies is to help the researcher make convincing explanations without the researcher being committed to confirm the theory’s explanatory capacity, as this can severely compromise the purpose of the research (Humphrey & Scapens, 1996). Rather the objective should be to use the theory in a guiding, skeletal manner allowing, thus, for the empirics to challenge the theory in a way that *theoretical generalisations* can be derived to motivate future research (Ahrens & Chapman, 2006; Yin, 2003).

According to Yin (2003), the researcher must develop a sufficiently clear research programme and a sound understanding of the chosen theory before engaging with the research process in a case study. In this respect he argued:

“the simple goal is to have a sufficient blueprint for your study [...] Then, the complete research design will provide surprisingly strong guidance in determining what data to collect and the strategies for analysing the data. For this reason theory development prior to the collection of any case study data is an essential step in doing case studies” (p. 29).

On the importance of a sufficiently clear research programme to guide the research process

Ahrens and Chapman (2006) also suggested that [...]

“problem, theory, and data influence each other throughout the research process. The process is one of inevitably seeking out to generate a plausible fit between problem, theory, and data” (p. 836).

In what follows, a presentation is provided of the major steps that were involved in the formulation of the research process and the interpretation of the research evidence.

4.3. Presentation of the industry and selection of the case organisation

This section considers issues that relate to the presentation of the industry as well as to the selection of the case organisation and the presentation of its profile.

In particular, Scapens (2004) argued that for a researcher to conduct an interpretive case study of accounting practice, i.e. [...]

“both in terms of the techniques, procedures, systems, etc. which are used and *the way* in which they are used” (Ryan *et al.*, 2002, p. 143, emphasis added)

[...] it is important to get immersed within the immediate and broader societal and economic context of the organisation. Drawing on Scapens, it is important, therefore, to also introduce the reader to the industry context and the case organisation before considering the research questions that guided the research because such a sequence will facilitate viewing these questions in-context.

As far as the context of study is concerned, Håkansson and Lind (2007) observed that IOCM and control [...]

“has been documented in a number of empirical studies within different industries and for numerous countries” (p. 889).

This research aims to introduce the study of the cost management and control of IORs in what seems to be a green field of research for management accounting, as it reports on IOCM and control practices of a shipping organisation situated in Greece. As far as the researcher is aware there is little or no research undertaken on this subject for shipping organisations and their

networks. There follows a discussion of the *reasons* for selecting the Greek-owned shipping industry and the case organisation, namely MarineCo²². This discussion is informed from extant research on the nature of the industry, and extends to include a presentation of MarineCo's profile²³, while paying attention to issues of access and ethics.

4.3.1. The industry context and some structural characteristics of relevance

The ocean shipping industry contributes significantly to world trade because sea transport is the only means through which large consignments can be transferred at the most cost effective way (Koufopoulos *et al.*, 2005). Greek-owned shipping is a major constituent of the world ocean shipping industry (Lagoudis & Theotokas, 2007; Thanopoulou, 2007; Theotokas, 2007) and in this respect, it can present a rather interesting context to explore because:

“[t]here is practically no other ‘first’ Greece can claim in the modern world economy apart from its place in world shipping” (Thanopoulou, 2007, p. 23)²⁴.

Greek hegemony in world maritime transport has persisted for more than a century and “Greek shipping companies either established in Greece or located in other maritime centres (i.e. London) have led the industry by example” (Pallis, 2007, p. 2, parenthesis in original), making the Greek case a unique paradigm worthy of closer examination (Pallis, 2007). To give some statistics, the London Greek Shipping Co-operation Committee's analysis, based on data derived from Lloyd's Register concluded that as of early 2007:

²² ‘MarineCo’ is pseudonym that is used throughout the thesis to conceal the identity of the organisation.

²³ Information on the nature and characteristics of the case organisation was collected from personal conversations with members of staff as well as from formal organisation documents such as its Annual Reports.

²⁴ The term ‘Greek-owned shipping organisations’ or ‘Greek-owned shipping industry’ is preferred to ‘Greek shipping organisations’ or ‘Greek shipping industry’ in order to highlight that these companies may be based outside of Greece and also to incorporate Greek-owned companies, which may have their vessels registered to flags other than the Greek.

“Greeks owned 3,699 vessels [...] the Greek-controlled fleet stands at approximately 8.5% in terms of vessels, 16.5% in terms of world fleet dwt and/or 14.0% of gross tonnage” (quoted in Pallis, 2007, p. 6).

What is distinctive, though, to the hegemony of Greek-owned shipping in world maritime transport is that it managed to retain its leadership through difficult times, not only during the oil crises of the 70’s, but also during the 90’s (Pallis, 2007; Thanopoulou, 2007) when the industry was subjected to immense regulatory restrictions calling for higher standards of safety in shipping imposing, therefore, significant changes to its operation²⁵ (Grammenos & Choi, 1999). In particular, following the accident of ‘Exxon Valdez’ in 1989, where tonnes of oil spilled in Alaska, the industry swept into the era of quality shipping, which was introduced by the passing in the USA of the Oil Pollution Act (OPA, 1990) that led the way for new regulations on an international level (Grammenos & Choi, 1999; Thanopoulou, 2007).

For example, amendments 13G and 13F of MARPOL in 1992²⁶ imposed new specifications in the construction of tanker vessels, which required the compulsory, though progressive withdrawal of all single-hull tankers and their replacement by double-hull ones. This requirement imposed an enormous cost burden on ship-owners that were now faced with a 10 to 15% increase in construction costs relative to that of single-hull tankers (Grammenos & Choi, 1999). In addition to OPA, the next most important regulation in the industry is the International Safety Management Code (ISM), which was issued by the International Maritime Organization

²⁵ According to Stopford (1997), a complex regulatory system has evolved during the 20th century to impact on “[t]he design of the ship, maintenance standards, crewing costs, operating standards, company overheads, taxation, commercial confidentiality, pollution liability, and cartels” (p. 422). Discussion of the specific regulatory requirements facing MarineCo is provided in Chapter 6, because there, such analysis contributes to an understanding of management’s decisions for change and adaptation as well as of the perspective prevailing in MarineCo on the nature of its IORs and the cost management and control practices enacted thereto.

²⁶ The MARPOL Convention is the main international convention, issued by the International Maritime Organization (IMO), covering prevention of pollution of the marine environment by vessels due to either operational or accidental causes. It is a combination of two treaties adopted in 1973 and 1978 respectively, and updates through the frequent issuance of amendments (http://www.imo.org/Conventions/contents.asp?doc_id=678&topic_id=258, accessed 18/02/2009).

(IMO) in 1994. The Code aimed to improve management procedures aboard and ashore and compliance to its provisions by shipping organisations was enforced in 1998 through compulsory certification issued by Classification Societies, which periodically audit shipping organisations on behalf of the flag state to which the organisation's vessels are registered²⁷. Nevertheless, Greek ship-owners managed to respond to regulatory pressures that required an increased capital base, new investments and more transparent operations by making wise investment moves and benefiting from an unforeseen positive turn of the freight markets in late 90's and early 00's.

This allowed Greek-owned shipping to secure “in this favourable market conjecture a much needed – though undefined in duration – new lease of maritime hegemony” (Thanopoulou, 2007, p. 25).

At this point, however, research in maritime economics and management called for investigation of the reasons behind the persisting capacity of Greek-owned shipping to be at the forefront of the industry (Lagoudis & Theotokas, 2007; Pallis, 2007; Thanopoulou, 2007; Theotokas, 2007):

Is this leading position “the result of successful management practices? Or were there (many) more factors contributing to competitive advantage gains? If this was all about successful corporate management, aren't there any flaws in the adopted management practices” (Pallis, 2007, p. 6, parenthesis in original)?

The structural characteristics of the Greek-owned shipping industry were brought forward to address these questions and a volume of the *Research in Transportation Economics* journal provides a comprehensive account thereto, while it also reveals *why* the Greek-owned shipping

²⁷ Classification Societies are outcomes of self-regulation efforts in the shipping industry and their mission is to “make rules for ship construction and maintenance and issue a ‘class certificate’ to reflect compliance” (Stopford, 1997, p. 423). There are more than fifty Classification Societies world-wide, the most prominent of which have formed the International Association of Classification Societies (IACS) that aims apart from introducing uniformity into the rules they develop, also to provide consultation to other major rule-setting organisations such as IMO. Classification Societies' role has increasingly been extended to act as representatives of governments, which have obtained flag state regulatory authority. The flag state is “responsible for regulating all aspects of the commercial and operational performance of the ship. International laws are developed by the participation of flag states in treaties or conventions” (Stopford, 1997, p. 423).

industry offers a fruitful context to undertake this research. In particular, the opportunities for case study research in the cost management and control of IORs of a Greek-owned shipping organisation can be identified by referring to Theotokas (2007) who provided an illuminating account not only of the structural characteristics of Greek shipping organisations, but also of their contribution to the sector's success.

Theotokas portrayed the archetype of the Greek-owned shipping organisation as being usually a small or medium-sized company that is *family-run* and controlled following its establishment by a shipping entrepreneur who becomes its leader and “controls almost every aspect of company operations” (2007, p. 74) along with other family members that occupy key positions in management. For Theotokas, this archetype proved successful and persisting even though recent trends of consolidation generated from soaring competition and an increasing number of shipping organisations turning public in search of funds challenge it²⁸ (Pallis, 2007, p. 6). At this point, following the calls of Free (2008), it is argued that the Greek-owned shipping organisation provides an opportunity to examine how and whether a hierarchical and autocratic organisational structure influences the nature of the organisation's IORs and their cost management and control.

Another structural characteristic of the Greek-owned shipping industry, which is of particular relevance to the aims of this research, is the use of *social networking*. Theotokas (2007) argued that networking is one of the most significant factors that contribute to the sustainable competitive advantage of Greek-owned shipping organisations. Networking involves shipping

²⁸ Theotokas (2007) observed in this respect that Greek ship-owners “are not motivated to change the family character of their companies adopting a managerial structure to gain access to other sources of finance [even if] during the last 5 years 15 Greek-owned shipping companies became publicly listed on the New York and London Stock Exchanges drawing capital for their expansion. However, even these companies remain family controlled” (p. 75, parenthesis added).

organisations participating in more than one loose or tight but informally structured national and international network with horizontal and vertical linkages (Theotokas, 2007)²⁹. According to Grammenos and Choi (1999), “[s]uch an arrangement generates positive network externalities such as transaction cost saving, build up of reputational capital, and quality assurance through trust, which stems from ‘Greekness’” (p. 34). ‘Greekness’ to Grammenos and Choi, refers to bonds of kinship and trust that originate from cultural and ethnic characteristics such as uncertainty avoidance and collectivism (Harlaftis, 1996; Hofstede, 1980; Theotokas, 2007). The reported centrality of social networking, therefore, in Greek-owned shipping motivates this research to consider the importance of informal controls in the management of MarineCo’s IORs.

Furthermore, on the importance of transaction cost savings, Lagoudis and Theotokas (2007) argued that cost minimisation was a major goal for all 83 Greek-owned shipping organisations they surveyed. They posited that maintenance of good relationships with suppliers and customers, willingness to negotiate cost and service changes with them, flexibility to meet customer demand, as well as cost management of spares and supplies inventory, are significant factors that contribute to the cost and quality of service of Greek-owned shipping organisations. However, they observed that there is lack of detailed studies investigating the above and that only [...]

“[a] number of studies have dealt with cost issues but from the shipper’s [i.e. customer’s] point of view and they have been related to carrier [i.e. shipping organisation] selection issues” (Lagoudis & Theotokas, 2007, p. 102, parentheses added).

²⁹ Theotokas (2007, p. 82) gave an indication of the ethnic and clan nature of Greek shipping networks by referring to such informal networks as those of ship-owners originating from the maritime island of Chios, e.g. the Chiots network of London, the London Greeks network or the Chiots network of Greek-owned shipping, which may also include organisations that are their suppliers, also controlled by Chiots.

Lagoudis and Theotokas' findings, which are of interest to the focus of this research, indicated that particularly large shipping organisations operating a diversified fleet, exhibit supply chain awareness and adopt a time-charter strategy. This suggests, as Lagoudis and Theotokas argued that [...]

“in order to compete, they have developed strong relationships with their customers (charterers) by investing in developing their systems to the level that could be compatible to those of the other parts of the supply chain” (2007, p. 115, parenthesis in original).

In relation to the above, Theotokas (2007) observed that the benefits of networking in Greek-owned shipping translate in reduction of transaction costs, information sharing and operating cost reductions. In particular, he argued that [...]

“[c]ompetitiveness of shipping companies depends strongly on their ability to reduce the cost and the risk of transactions with charterers, suppliers, classification societies, insurers, ports” (Theotokas, 2007, p. 83).

At the same time, he emphasised that shipping is an information intensive industry where information about freight rates, freight demand and forecasting as well as available supplies of deck and engine equipment is necessary on a timely basis if the organisation is to minimise its transaction costs and risks. In this respect, the formation of networks facilitates the acquisition of superior information through cooperation and according to Theotokas (2007), who drew from Casson (1993),

“[n]etworking minimizes the risk and reduces the cost inherent in every transaction performed with instant negotiations in the market through ‘arm’s length’ contracts. The factor that allows this type of contract is trust” (Theotokas, 2007, p. 83).

It is important to underline at this point, however, that while Theotokas (2007) acknowledged that networking is an essential contributor to the sustainable competitive advantage of the Greek-owned shipping industry, he cautioned his reader that [...]

“there are certain aspects of company operations that require further *understanding* and *interpretation*. This is the case of the loose or tight inter-firm relationships that characterize the Greek-owned shipping firms” (p. 80, emphases added).

The aforementioned points provide, therefore, a strong impetus for investigating the cost management and control mechanisms that are exercised by a shipping organisation in its IORs.

As Pallis (2007) puts it [...]

“It is commonly said that ‘Greeks have the sea in their blood’; hence it is really worthy to discuss the economics of the Greek maritime transport paradigm having an input by those that are part of the tradition” (p. 20).

In this respect, MarineCo provides the field to address the intellectual puzzle of this research, which seeks to extend theoretical understandings in IOCM and control (Coad & Cullen, 2006; Mouritsen *et al.*, 2001; Seal *et al.*, 2004), and particularly on the *form* that it takes, the *reasons* for which it takes such form, and the *way* in which such controls are exercised to coordinate relationships with suppliers and customers.

The *focus of study*, therefore, is to gain an understanding of MarineCo’s IORs and the cost management and control practices it enacts to coordinate costs and revenues from such relationships. This focus is articulated in subsection 4.3.4 in the form of research questions that were addressed through the lenses of Stones’ version of ST and which emerged from the opportunities for further research identified in the literature review. There follows a discussion of not only the *reasons* for selecting MarineCo, but also the ethical and access restrictions that applied to the research.

4.3.2. Selection of case study site and ethics

The previous subsection revealed *why* the Greek-owned shipping industry was selected to undertake case study research in the cost management and control of IORs.

As far as choice of the case study site is concerned, Ryan *et al.* (2002) argued that the selection of a suitable organisation often entails the risk that the researcher may seek to identify a ‘representative’ case to act as a sample from where to make generalisations in a statistical sense (see also Yin, 2003, p. 32). This is a false aim, as case studies do not offer such potential. Rather case studies should be used to develop and extend already established theories on the nature of accounting. Scapens (2004) argued that the selection of a suitable case depends on the research questions and the theoretical framework that underpins the research; he concluded in this respect: “the researcher should try to select cases that display those characteristics” (p. 262). Following Scapens’ (2004) argument, the idea to approach MarineCo occurred to the researcher after having reviewed the IOCM and control literature and identified opportunities worthy of further investigation to generate research questions. In search of a case study site, he thought that his broad awareness of the shipping business and a contact he had at MarineCo offered good reasons to investigate whether the specific organisation provided a fruitful setting for undertaking the research.

In this respect, the researcher visited the organisation’s web site in an attempt to identify hints of opportunities for research at MarineCo. There, he found encouraging information, as it was stated that one of the main factors contributing to MarineCo’s growth, success and reputation is its commitment to building long-term relationships with oil majors, state-owned oil companies and other first-class charterers, all of which were MarineCo’s customers. Then, the researcher

decided to access MarineCo's annual reports. There, he found evidence of the organisation maintaining long-term relationships not only with charterers, but also with suppliers as well as joint ventures (JVs) with state-owned oil companies. This information motivated the researcher to contact his acquaintance, who was positioned at the Chartering department, to inquire further on MarineCo's approach to IORs. From conversations with that person, the researcher derived further encouraging information, particularly in terms of long-term relationships with charterers, which appeared to be coordinated through time-charter contracts and profit sharing agreements³⁰. Soon after that, in a preliminary visit to the potential research site, the researcher managed to meet with the human resource manager and later with the general manager where he was asked to present his research interests and programme. During this visit, the information he obtained from the general manager was very positive, indicating good potential for the research, because MarineCo appeared to be heavily involved in deploying cost management and control practices to coordinate its relationships with suppliers and charterers that involved cooperative arrangements.

With regards to research ethics, corporate management asked that MarineCo's identity remain confidential in exchange for offering access to the organisation. This requirement raised ethical commitments and posed restrictions on behalf of the researcher to protect the identity of the organisation through careful management of the information he accessed. Moreover, as part of an ethical research practice, it was agreed that it would be at the discretion of interviewees to give an interview, and that their identities would be concealed.

³⁰ The contact the researcher had at MarineCo was, as mentioned previously, positioned at the Chartering department of the organisation and, therefore, the information he provided was concerned with MarineCo's relationships with customers.

Direct access to suppliers and charterers was not allowed, as the general manager expressed concerns that the research might cause uneasiness and suspicion in them. This restriction limited opportunities for collecting evidence from multiple organisations and extend the boundaries of the research beyond an analysis of the focal organisation's perspective. However, documentary evidence recording relationships with suppliers and charterers was available to be accessed and this compromised obstacles to a multiple points of view research account. An indication, therefore, of these organisations' perspectives on the nature of MarineCo's cost management and control practices was only derived by reference to document evidence accessed in the latter.

Finally, no specific contribution to the organisation was requested, even though the general manager was willing to discuss any issues the researcher thought could contribute to MarineCo's potential improvement. The researcher visited the site on a daily basis between the 25th of June 2007 and the 30th of September 2007 to undertake his research. There follows a presentation of MarineCo with the aim of familiarising the reader with the context and of highlighting its research opportunities.

4.3.3. The case study site

MarineCo is a shipping organisation, located in Piraeus, Greece. It is controlled and actively managed by members of a Greek ship-owning family and its prime operation involves the transfer of goods on behalf of customers, i.e. charterers, by sea. In order to achieve this objective, MarineCo engages with technical and commercial management services of the vessels it owns,

rather than outsourcing these activities, as ship management is perceived as a core competence of the organisation.

MarineCo was founded by the head of a well-known Greek shipping family in the 70's, and since then it has been established as one of Greece's top ship management organisations³¹ and one of the largest tanker-owning organisations in the world based on the number of vessels under management, with a total of 75 vessels and a further 30 new-buildings delivered as of early 2007. Moreover, MarineCo operates as a listed company on a leading stock exchange with a landmark in its financing strategy an initial public offering it launched soon after its listing. The organisation manages and operates a diversified fleet of tankers, container and dry cargo vessels and, through its long presence in the shipping market, has developed significant expertise in the areas of procuring, insurance, maintenance, voyage operations and crewing, with a commitment to provide ship management that offers low operating costs and high quality and safety. MarineCo has enhanced its fleet diversity by owning very new tanker vessels of various sizes and technical specifications. In detail, the organisation, apart from container vessels and bulk carriers, specialises in the transport of international seaborne crude oil and petroleum products and its fleet comprised as of early 2007, 50 oil plus liquefied natural gas (LNG) tanker vessels, all double-hulled. The tanker fleet comprises very large crude carriers (VLCCs), suezmax, panamax, aframax, handymax and handysize tankers.

The organisation acknowledges that one of the major factors contributing to its success has been its strategic choice to provide quality and secure services to charterers, which is a prerequisite for pursuing and maintaining long-term relationships with them. As mentioned

³¹ Theotokas (2007, p. 73), analysing the size of Greek-owned shipping organisations argued that large organisations are considered those that own more than 16 vessels.

previously, charterers are the customers of a shipping organisation and are broadly defined as those parties who seek to identify the proper ship to carry their cargo to their required destination (Payne & Ivamy, 1972). Such parties may be other shipping organisations, the actual cargo owners, the shippers and/or the receivers of cargo. As regards MarineCo's charterers, these include dry cargo shippers, oil-major organisations, state-owned oil companies and liner operators. In particular, MarineCo has established long-term relationships – or what they call 'time-charters with or without profit sharing' – with the aforementioned charterers. These relationships are coordinated by the organisation's Chartering department, which is responsible for the chartering strategy. The chartering strategy involves hedging against the economic cycles of the shipping industry, by securing constant cash flow in periods of downturn, while benefiting from increases in charter rates during periods of resurgence.

To achieve this strategy, MarineCo deploys two-thirds of its fleet in time-charters, i.e. long-term contracts of employment, for several months or years with fixed rates or minimum rates plus profit sharing agreements, while it retains a third of the fleet for charter in the spot market, i.e. single voyages. Spot voyages last up to several weeks and can provide opportunities for increased profit-margins as they benefit from potentially abrupt increases in charter rates. In this respect, MarineCo's chartering strategy stimulates investigation of the organisation's relationships with charterers, their cost management and control and the parties' requirements, e.g. in terms of contributions or mutual investments before the terms of a profit sharing agreement are set.

Furthermore, MarineCo maintains long-term relationships with suppliers in the area of deck and engine procurement, as well as close involvement in the dry-docking repairs and new-

building projects it assigns to shipyards in China, Japan and South Korea. At this point, the nature of MarineCo's relationships with suppliers and shipyards highlights the potential for investigation of the cost management and control practices it employs thereto, especially given the organisation's stated pride in the long-term relationships it has established. At the same time, the fact that MarineCo is still predominantly family-run despite it being a listed organisation, indicates the potential for research to consider whether and how this structural characteristic of the Greek-owned shipping industry (Harlaftis, 1996; Theotokas, 2007) influences the organisation's management of IORs in light of the uncertainty avoidance and need for collectivism that characterises Greek shipping (Theotokas, 2007).

MarineCo operates under a highly centralised organisational structure where its founder is situated at the top of the organisational pyramid and his blood line successors occupy key management positions. The founder intervenes often on a daily basis in management activities, but overall, assigns management responsibility to the general manager who oversees all departments. Departmental managers possess authority to proceed with their activities but, under most circumstances, they need to get the general managers' approval even for operational matters. MarineCo's organisational structure reflects its corporate culture, whose foundations lie in the strong personality of the founder and the traditional Greek ship management characteristics he conveys and which reflect a paternalistic approach to management.

In detail, MarineCo's organisational structure comprises apart from the Chartering department, the Control department which is responsible for freight collection and the allocation of port and voyage-related overheads between the organisation and the charterers, suggesting here an area for research to investigate the controls, processes and circumstances under which

these cost allocations take place. Moreover, MarineCo holds a Technical department which is responsible for the maintenance of the fleet and which also comprises a Spares provision unit that is responsible for the procurement of engine parts and engine-related stores. The Technical department is also responsible for initiating and coordinating dry-docking maintenance and repair projects with shipyards, suggesting opportunities for research in the cost management and control of both spares supplier relationships and shipyard relationships, which involve substantial investments. Then, the Procurement department is responsible for the provision of deck equipment and stores where strong supply relationships are a prerequisite for ensuring that provisions reach the vessels on a timely basis and at the lowest possible cost.

MarineCo's overall operations are monitored through the Accounts department which also controls two further sub-units, namely: Internal Audit which is responsible for designing and monitoring compliance with the organisation's procedures and controls, and Checking. Checking's role is to ensure not only that the controls set in place are abided by and that any deviations from pre-set standards are addressed, but also that suppliers' opportunistic behaviour is eliminated. Other departments involve Quality and Safety, which is responsible for establishing quality and safety procedures in line with regulatory and customer requirements; Crewing, which is responsible for manning the organisation's vessels; Treasury, which engages with financial planning, and finally Legal, which deals with claims and insurance issues.

Another characteristic of MarineCo is that it prides itself to have made all required changes in its management structure to comply over-and-above with regulatory and customers' requirements. Against the previously sketched context, research at MarineCo calls for investigation of the organisational and extra-organisational factors to examine how and whether

they influence the nature of the organisation's IORs and their cost management and control. After the detailed discussion of the industry and organisation context, there follows a presentation of the formulated research questions that derived from the opportunities for further research identified in Chapter 2 with the aims of guiding research at MarineCo.

4.4. Research questions

On the importance of having clear research questions before conducting case study research Scapens (2004) observed:

“My experience in conducting case research certainly confirms Yin's view that case study research is remarkably hard [...] Case study research requires clear research questions, a thorough understanding of the existing literature, a well-formulated research design with sound methodological underpinnings, and above all excellent language skills” (p. 258).

Following Scapens' view, Chapters 2 and 3 engaged with a review of the literature and a clarification of the methodological underpinnings of this research respectively. These tasks are essential to help the researcher identify the potential of his research for contribution and then to employ an appropriate research strategy, formulate research questions and choose appropriate evidence collection methods (Mason, 2002; Ryan *et al.*, 2002). In particular, emerging themes for further research from the literature review led to the formulation of 'how', 'what' and 'why' research questions (Yin, 2003), which helped the researcher arrive at theoretically informed conclusions hinging on the philosophical assumption that reality is *subjective*, and *relative* to spatiotemporal dimensions.

The themes, therefore, were employed to formulate research questions, which at the same time supported the overall aim of the research that was to *examine the forces that facilitate and/or hinder the adoption of cooperative cost management and control practices in IORs*.

Overall, the themes suggested that further research is needed on why choice of certain modes of IOCM and control is made, what issues influence this choice, how these issues may restrict or enable alternatives, and what are the consequences from this choice. The following questions were formulated in keeping with the research questions supported by Stones' version of ST, but also in consideration of the opportunities and constraints offered by the broader industry context and the site. These research questions were designed to reveal the hermeneutics, phenomenologies and action of agents within MarineCo in respect of the organisation's IOCM and control practices:

1. What are the IOCM and control practices of MarineCo? Do these support a cooperative and mutually beneficial or a competitive approach? Are they formal, accounting-based and bureaucratic or informal?
2. Why has MarineCo established these IOCM and control practices and how have these practices been maintained or changed in recent years?
 - 2.1 What has been the role of MarineCo's organisational structure in embedding a cooperating and trusting or a competitive and dominating perspective in the cost management and control practices of its IORs? How did this take place?
 - 2.2 What has been the role of relational organisations such as suppliers and customers or other significant agents outside MarineCo, such as regulatory bodies, in influencing the cost management and control practices it enacts in its IORs? How did this take place?
3. What are the intended and unintended effects of MarineCo's IOCM and control practices and how have these affected or are likely to affect in the future the management of the organisation's IORs?

In terms of the appropriateness of the aforementioned research questions to be examined through the lenses of Stones' version of ST, it is argued that their object of inquiry, which is MarineCo's IOCM and control practices and its interaction with other aspects of the organisational and institutional environment, can be approached as outcomes of "*causal processes of structuration*" (Stones, 2005, p. 126, emphasis in original). These structuration processes are implicated by the influences of immediate and more distanced structures conditioning a web of intra- and inter-organisational position-practice relations where incumbent agents draw from their knowledgeability of structures, however discursively or tacitly, to inform their actions and control a set of spatial and temporal arrangements (Stones, 2005). The above research questions, viewed through the lenses of Stones' version of ST, seek to "know *what* has causally produced those phenomena over a particular time period" (2005, p. 126, emphasis added) as well as *how* and *why* these phenomena were produced (see Coad & Herbert, 2009).

Further, these research questions can be approached, according to Stones, through a 'composite study', which can examine the perspectives of a number of agents who can be seen "as both first and third person depending upon whose position in the nexus is in focus at any one time" (Stones, 2005, p. 126). This research benefited from that potential of Stones' framework and examined the perspectives of different agents-in-focus at MarineCo who were approached as both first and third person³², depending on the focus of the study at each specific phase. The 'agent-in-focus', therefore, was the unit of analysis of this research and this methodological choice influenced not only the nature of the research methods that were deployed, but also the

³² The restrictions that applied to the research in terms of contacting MarineCo's suppliers and customers meant that these agents-in-focus were mainly approached as third persons through the action-informing conclusions of the agents-in-focus within MarineCo that were involved in relationships with them. However, some of these suppliers and customers were also approached as first persons by employing the e-mails and contracts they drafted to enact IOCM and control with MarineCo to proxy their perspectives.

interpretation of the research evidence. A detailed discussion, however, of how the concept of the ‘agent-in-focus’ contributed to the analysis of the research evidence along with the methodological issues that emerged from considering more than one agents-in-focus is offered in the following Chapter. In what follows, a discussion is provided of the research methods that were employed to collect research evidence to address the research questions.

4.5. Selection of appropriate research evidence collection methods

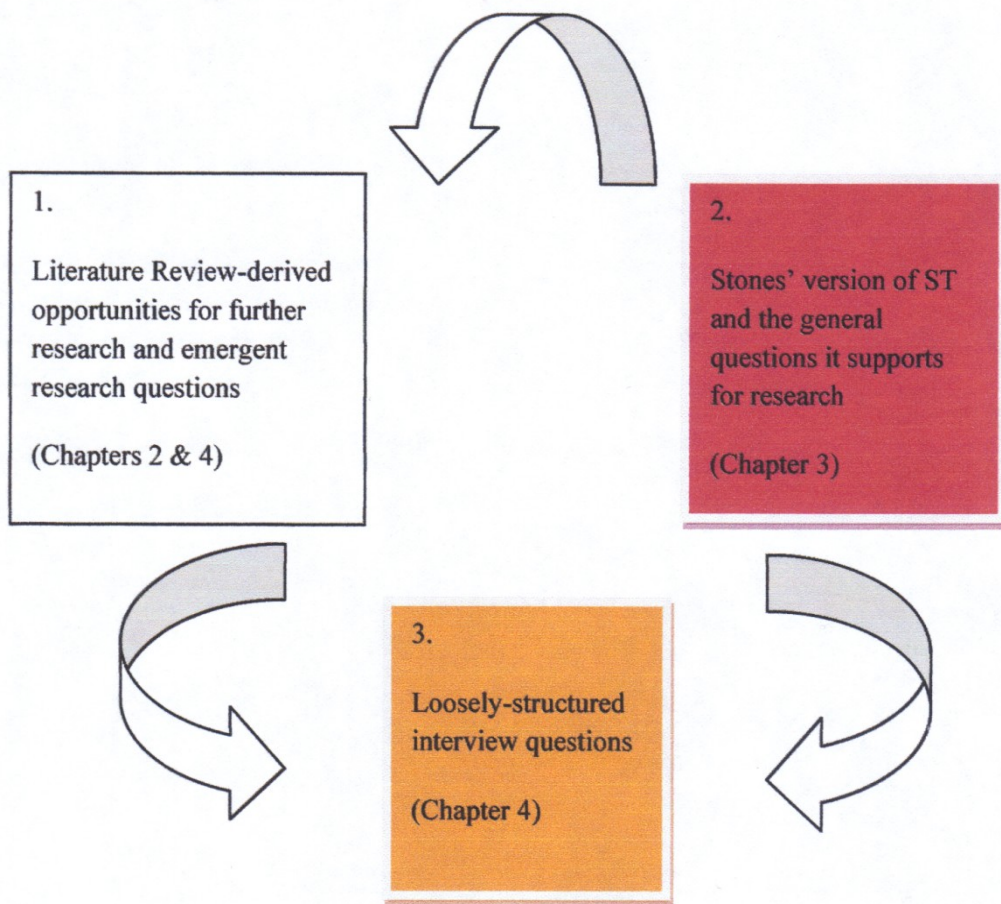
As indicated previously, the research process was articulated through a case study guide that in addition to the research questions, also considered issues related to what sources of evidence qualify as appropriate for the purposes of this research, and therefore, what methods of evidence collection should be employed. On this matter, Ryan et al. (2002) argued that evidence that “the researcher has adopted appropriate and reliable research methods and procedures” (p. 155) enhances the *procedural reliability* of the research³³.

A major issue involved in undertaking the research referred to the role of the researcher in the research process. In line with ethical considerations, it was decided that his role would be overt, and therefore, he disclosed to the employees the aims of his study. This choice facilitated daily observation of MarineCo’s activities because the researcher had clarified his role in the organisation and had dissolved any suspicions on behalf of the employees. Moreover, this choice was supported by the recognition that in qualitative field studies the researcher is an indispensable part of the research process (Ahrens & Chapman, 2006). The first method of

³³ At this point, it is important to emphasise that Yin (2003) adopts a *positivist* stance towards evaluating case study research, meaning that he relies on criteria such as *reliability* and *validity* that may not be appropriate for assessing the quality of interpretive case study research (see Berry & Otley, 2004, pp. 234-236).

evidence collection, therefore, referred to the *daily observation* of the activities taking place in the various departments, supplemented by attendance at meetings, observation of informal discussions among employees and managers, and informal discussions triggered by the researcher with managers and employees. All observations, reflections and informal discussions were recorded in a journal as soon as possible in line with the procedures proposed in the case study guide.

Another substantial source of research evidence was provided by conducting *semi or loosely-structured interviews* (see Bryman & Bell, 2003). The reason for choosing the loosely-structured interview over the structured mainly had to do with the philosophical assumptions underpinning the research and the fact that the researcher wished to adapt each interview on the specific circumstances facing the interviewee. This approach ensured both a level of flexibility and a level of structure that was seen by the researcher as capable of enabling comparisons between interviews, during the interpretation of the research evidence. Table 4.1 presents the loosely-structured interview questions, which were included in the case study guide and which were informed by the *general* questions Stones' version of ST supports (presented in Chapter 3, part 3.3.7) with the aims of addressing the research questions identified in the previous Section (see Figure 4.1).



Opportunities for further research that derived from the literature review provided the basis for formulating research questions that can be addressed through the lenses of Stones' version of ST (hence the unidirectional arrow from Box 2 to Box 1). The loosely-structured interview questions were designed in a way to address the research questions in keeping with the general questions that Stones' version of ST can address.

Figure 4.1: The research process articulated

Table 4.1: Loosely-structured interview questions in keeping with Stones' version of ST

Stones' ST-supporting question	1	What are the salient external structures, and how do they influence the phenomenology, hermeneutics and practices of the agent-in-focus in respect of IORs and their cost management and control?
Corresponding loosely-structured interview questions	1.1	How would you define the overall context within which inter-organisational activities take place? Who is involved in that context and what is the role of other groups in the organisation?
	1.2.	How does your position relate to this context? To whom do you have to report and is it taking place directly or indirectly?
	1.3	How does this context influence the nature of IORs with suppliers, customers and partners and the cost management and control practices you employ thereto?
	1.4	Has the organisation or your department been required to adapt to any specific requirements or constraints posed by that context and how did you react to that? Have these requirements influenced the cost management and control of your relationships with suppliers, customers or partners and how these interrelated with changes in the control system of the organisation?
	1.5	How do you think this context is likely to influence the nature of the IORs pursued, the benefits accrued, and the nature of their cost management and control in the future?
Stones' ST-supporting question	2	What are the general dispositions of an agent-in-focus towards IORs and their cost management and control?
Corresponding loosely-structured interview questions	2.1	If you are asked to describe what is your understanding of IORs in general, their purpose, benefits and requirements for control what would you say?
	2.2	What is your perception of the organisation's IORs?
	2.3	Do you believe the organisation's approach to IORs meets your understanding of IORs?
	2.4	Is the organisation's approach to IORs uniform? Where do you locate any differences, if any?
	2.5	What is your background and what skills do you believe are required for managing IORs?
	2.6	Has there been any incident or requirement that changed the management control of IORs? If yes, how do you feel about the changes effected?
	2.7	How do you think the cost management and control of the organisation's IORs should change in the future?

Stones' ST-supporting question	3	What are the salient conjuncture-specific internal structures of an agent-in-focus in respect of IORs and their cost management and control?
Corresponding loosely-structured interview questions	3.1	How do you feel about your duties? How do these relate to the management of the organisation's IORs?
	3.2	How is your role perceived by others in the organisation or out of it and how do they influence your work?
	3.3	What do you think are the necessary skills that helped you undertake your duties and how did you need to develop these skills?
	3.4	How do you think your duties changed in recent years and who brought about this change?
	3.5	What is the nature of the cost management and control practices enacted?
	3.6	What is the use of collaborative cost management controls in IORs? Can you define any mutual cost benefits accrued from cooperating with suppliers and customers?
	3.7	Do the same controls apply for relationships with suppliers, charterers and partners?
	3.8	To what extent do you rely on reputation, trust, personal relations and power to pursue IORs? How are cost management and management control practices influenced in this respect?
	3.9	How do you feel others in the organisation or in the counterpart organisations make use of such relational attributes? Do they perceive the way cost management and control is employed in IORs brings mutual benefits?
	3.10	How do you perceive the nature of IORs and their management control to change in the future from the perspective of your immediate area of responsibility? How will you be involved in that change?

Stones' ST-supporting question	4	What are the practices of an agent-in-focus in respect of the cost management and control of IORs?
Corresponding loosely-structured interview questions	4.1	What are the procedures through which you set up and monitor relationships with suppliers, charterers and partners?
	4.2	How do you manage to achieve mutually beneficial cost efficiencies from the management of IORs with suppliers, charterers and partners? Could you give some examples?
	4.3	Do you have to make concessions in order to establish and strengthen IORs or do you resort to coercive mechanisms to get what you want?
	4.4	Does openness of transactions in terms of cost disclosures between the organisation and its counterparts form part of a management control strategy to improve the relationship to the mutual benefit of the parties?
	4.5	How has your practice of management control of IORs changed in recent years? Has there been any change on procedures and techniques to control IORs and where did they emerge from?
	4.6	How these changes influenced your work and what were the consequences for the work of others to whom you refer or relate to?
	4.7	How do you see practice of management control of IORs to be getting to in the future? What do you think will be the basic characteristics and purposes of such controls?
Stones' ST-supporting question	5	What are the outcomes from the cost management and control of IORs, such as intended consequences, unintended consequences, contradictions within and between structures and with practices?
Corresponding loosely-structured interview questions	5.1	How do you think about the results from your practice of management control in IORs?
	5.2	Are there any cases where changes in the practice of the cost management and control in IORs brought results that you had not expected before? And if yes, in what sense? If no, what did these changes help you achieve?
	5.3	Is there anything you would like to see changing in the practice of management control of IORs in the future? And if yes, what results would you expect and how can you help to this direction?
	5.4	What is it that needs to be changed in the way IORs are established and managed, but which you feel unable to do on your own? Who could be of help and what results do you expect to see?

It should be emphasised here that the intention was to use the above questions as a tentative ‘interview schema’, an *aide-mémoire* that would provide the researcher with prompts for questions to be addressed against the specific context of MarineCo and the circumstances emerging during the interview, rather than as a checklist of all questions to be asked on all occasions³⁴.

Finally, it should be mentioned that the researcher considered the calls of Coad and Herbert (2009, p. 182), and Ahrens and Chapman (2006, p. 832), who suggested that researchers should approach research evidence emerging from interviews with a critical stance. Their calls caution researchers that interviewees intentionally or unintentionally, due to the dominating effects that practical consciousness has on their expression of knowledgeability, often provide accounts of the ‘official story’ that are contrary to observed evidence³⁵. As a response to that, and in accordance with Stones’ (2005) recommendations³⁶, the research also made use of evidence emerging from *documents* that can act as proxies to agents’ *action* and its *outcomes*, so as to supplement personal observations and interviews. Access was provided to such documents as press releases, annual reports, organisational policies, charts and procedures, contracts with suppliers, documents related to the management of supplies, e.g. e-mail exchanges and orders, charter-parties, contracts and e-mail exchanges with shipyards, and inter-office memos on policies regarding new accounting procedures.

This research therefore, employed *method triangulation*, i.e. observation, loosely-structured interviews and access to archival resources, in order to facilitate gathering a rich

³⁴ See Chapter 5, pp. 167-172 for a discussion on how the interview process unfolded.

³⁵ See Chapter 3, pp. 114-115.

³⁶ See Chapter 3, p. 115.

variety of research evidence from more than one source, and to strengthen confidence on the integrity of the research findings.

4.6. Recapitulation

This Chapter extended Chapter 3 by considering the technical aspects involved in the undertaking of the research.

In detail, this Chapter engaged with the choice of the case study as an appropriate research strategy by arguing that it supports the philosophical assumptions underpinning this research, and further, that it provides the best platform for applying a structurationist framework such as Stones (2005). Following this, discussion shifted to consider aspects that ascertain the rigour and integrity of the research process, and which were included in a case study guide prior to entering the research site. These aspects referred, among others, to the formulation of appropriate research questions conducive to Stones' version of ST, which were derived from the opportunities for further research identified in the literature review. The presentation of the research questions were preceded by discussion of the chosen case study site, namely MarineCo, a shipping organisation. The reasons for which this organisation was selected and the ethical commitments that access to it generated were also discussed. Moreover, discussion placed emphasis on the nature of the industry sector, highlighting the role of the regulatory environment and the role of some structural characteristics of the shipping industry that were thought to be relevant to research objectives of this research.

Following presentation of research questions, the focus shifted to identify appropriate methods for collecting research evidence. Loosely-structured interviews, reflections from

observations and discussions, which were recorded in a journal, as well as documents, comprised the major sources of research evidence. Finally, a tentative loosely-structured interview guide that was intended to be used as an aide-mémoire in interviewing was presented. The interview questions were constructed in a way to reflect on the questions supported by Stones' framework, while it was acknowledged that it may not be possible to address all interview questions to all interviewees as this would depend on the circumstances facing the specific interviewee and MarineCo in general. Moreover, it was mentioned that interview evidence should be approached with a critical stance in case the interviewees intentionally or unintentionally reported the 'official story'.

The next Chapter identifies a number of issues that emerged following the researcher's entrance to the research site, and which subsequently influenced the research process. It also introduces the approach that was taken in the analysis of the research evidence.

CHAPTER 5

PRELIMINARY CONCERNS PRIOR TO CONSIDERING RESEARCH FINDINGS

5.1. Introduction

The previous Chapters of the thesis explored the theoretical and methodological foundations of the study. A literature review in Chapter 2 concluded with the identification of opportunities for further research. Following this, Chapter 3 argued in favour of a structurationist perspective to guide research in the cost management and control of IORs. Chapter 4 in turn, focused on issues of research design and introduced the case study site and the industry. It moved on to formulate research questions in keeping with the theoretical insights provided by Stones' version of ST. Then it considered the research evidence collection methods and presented a loosely-structured interview guide, which was aimed to be used as an *aide-mémoire* to conduct interviews. Finally, it described the triangulation, which was designed to strengthen confidence on the integrity of the research findings.

This Chapter moves forward to engage with issues involved in the analysis of research evidence and stands as an introduction to the presentation of findings in the next Chapter. These tasks are supplemented with a consideration of some issues that emerged following the researcher's entrance to the research site, which influenced the research process. These issues required changes by the researcher to his loosely-structured interview guide. Most importantly, however, this Chapter discusses the process or the 'path' that was followed to analyse the research evidence and the measures that were taken to ensure the grounding of the research, while considering at this point any hindrances arising from the ethical commitments undertaken. Thus, the purpose here is, along with Chapter 4, to assist the reader to evaluate the conceptual standing and potential of the research.

The Chapter is structured as follows. Section 5.2 presents a discussion of the issues that unfolded during the early stages of the research and presents the modifications that were made in the interview questions in order to respond to the circumstances as they unfolded at MarineCo. Section 5.3 discusses the process that was followed to analyse the research evidence and presents a list of codes that was employed for that purpose. Then, Section 5.4 presents the criteria against which the integrity and value of the research were assessed and provides the steps that were taken to ensure compliance thereto. Finally, in Section 5.5 some concluding remarks are provided.

5.2. Issues that unfolded during the research and which influenced the research process

The researcher entered the site in late June 2007. The initial introduction to the organisation was not an easy task as the researcher had to ensure that he gained acceptance and identity among organisational members and that he did not obstruct their daily routines. Trustworthiness and a feeling of confidence from MarineCo's employees to the researcher was a major challenge during the first days of the research.

Assistance to this direction was provided by the human resource manager who, along with the general manager of MarineCo, eagerly introduced the researcher to members of the organisation. Further, the founder of MarineCo spent some time to discuss with the researcher the focus of his research and the potential insights that it could offer to the organisation. Among the initiatives that were taken to increase awareness and acceptance of the researcher at MarineCo was the assignment of a desk in a quiet room where he could review documents, record his reflections and transcribe interviews. Further initiatives in this direction involved provision of a name badge that identified him as research assistant to MarineCo and then the circulation of an

inter-office memo³⁷ to all departments where the researcher's background, his research interests and requirements along with a timetable for spending time in a number of departments was included³⁸.

During the first days of the research, the researcher began to develop an understanding of MarineCo's management culture, the nature of its IORs and their cost management and control as well as of the policies, procedures and 'major projects' that were at the forefront of MarineCo's agenda. With regards to IOCM and control the chief marine officer urged the researcher to "set new ideas as to ways of dealing with costs", whilst he cautioned that the phrase "cost efficiencies" should be preferred to "cost reduction" because the latter causes uneasiness to employees and resistance. The officer observed that politics play an important role in MarineCo and that one should be careful what words he or she chooses to use. In relation to the above, and from conversations and observations the researcher made, he realised that if he was to be successful in his interviews he should address interview questions not only in a concise and simplified manner, but also in a way that would not trigger suspicion or resentment on employees' behalf. This realisation was strengthened by the fact that a vast majority of the employees at MarineCo were middle-aged people, some of which were retired marine officers who did not have a university degree in management, and therefore, lacked a background for handling issues of cost management and control in an informed way.

Moreover, the researcher noticed that the cost management and control practices in MarineCo's IORs were not described in organisation procedures or described by people in a way

³⁷ The inter-office memo is not disclosed as part of a commitment to protect the anonymity of the organisation.

³⁸ Departments such as Crewing and Legal were excluded because the general manager argued that Crewing and Legal were not relevant to the objectives of the research.

that encouraged asking questions related to literature prescribing techniques such as VCA or target costing. Against this background, the researcher decided that the loosely-structured interview guide should not force theoretical preconceptions about IOCM and control into the setting, but instead to derive insights specific to MarineCo's IOCM and control practices, allowing, therefore, the empirics to feedback and modify theoretical preconceptions (Ahrens & Chapman, 2006; Berry & Otley, 2004; Broadbent & Laughlin, 1997; Humphrey & Scapens, 1996; Laughlin, 1995). To respond to these exigencies, the researcher decided to modify the loosely-structured interview questions, nevertheless, remaining in keeping with Stones' version of ST.

Another factor that encouraged modification of interview questions was the feedback received from the human resource manager who had asked to review the loosely-structured interview guide before the researcher set out to interview people. The manager noticed that the interview guide was far too long and that even if used as an *aide-mémoire*, the researcher should address questions more specific to MarineCo's context if he wished to succeed in interviewing a substantial number of employees and derive insightful responses. On the basis of the above circumstances, the researcher revised his loosely-structured interview guide to also accommodate the comments the human resource manager had made³⁹. Table 5.1 below presents the *modified* loosely structured interview questions as these were used to guide interviews at MarineCo.

³⁹ The human resource manager was acting as a mentor to the researcher for a considerable period of his research at MarineCo and was always eager to liaise with employees difficult to contact in order to assist the research project.

Table 5.1: Modified loosely-structured interview questions in keeping with Stones version of ST

Stones' ST-emergent question	1	What are the salient external structures, and how do they influence the phenomenology, hermeneutics and practices of the agent-in-focus in respect of IORs and their cost management and control?
Corresponding loosely-structured interview questions	1.1 1.2 1.3	Which factors constrain or encourage the development of IORs? What is the role of the Checking department in the management of costs with suppliers? How has HERMES (i.e. integrated information system) contributed to improving operations in your department or to the organisation in general? How has the system affected the cost management and control of transactions with suppliers?
Stones' ST-emergent question	2	What are the general dispositions of an agent-in-focus towards IORs and their cost management and control?
Corresponding loosely-structured interview questions	2.1 2.2	Which you think are the basic ideals or factors that contributed to the organisation's success? Which are in your opinion the benefits from pursuing long-term relationships with suppliers, customers or partners?
Stones' ST-emergent question	3	What are the salient conjuncturally-specific internal structures of an agent-in-focus in respect of IORs and their cost management and control?
Corresponding loosely-structured interview questions	3.1 3.2 3.3 3.4	Could you describe the content of your position? How is your position involved in relationships with customers and/or suppliers? Which skills do you believe contribute to the undertaking of your duties? How do you think these skills interrelate with the management of relationships with charterers and suppliers or with the requirements of regulatory bodies? How has the routine of your position changed in relation to changes in the operation of your department or the organisation in general? Were there any cases where the personnel expressed reservations to the proposed changes? Did you propose any changes in the procedures, which could facilitate the undertaking of your duties? What is the role of concessions or goodwill in the management of MarineCo's IORs with long-term charterers and suppliers? Could you think of any examples? What is the role of trust, power and reputation?

Stones' ST-emergent question	4	What are the practices of an agent-in-focus in respect of the cost management and control of IORs?
Corresponding loosely-structured interview questions	<p>4.1 Can you remember any cases where you managed to achieve cost efficiencies from cooperating with suppliers or charterers? What are the means you employ to achieve cost efficiencies? Is it through cooperation with them or what?</p> <p>4.2 What are the major procedures through which MarineCo controls the effectiveness of its long-term relationships? How have the control mechanisms employed to control your transactions with such partners changed in recent years?</p> <p>4.3 What are the major control mechanisms through which you mediate the relationships of the organisation with oil-majors and other important charterers? How do you try to sustain relationships of benefit to MarineCo?</p> <p>4.4 What is the role of profit sharing agreements in charter parties? What are the factors encouraging their implementation and which are the contributions of each party so that both can have a right to the profits? What determines the apportionment of shared profits?</p> <p>4.5 What are the major procedures/control mechanisms through which management evaluates MarineCo's performance and how does this procedure influence the control of its IORs?</p> <p>4.6 How do you account for costs in your department? Is there any plan for setting targets to reduce costs in your department? If yes, how do you achieve this?</p>	
Stones' ST-emergent question	5	What are the outcomes from the cost management and control of IORs, such as intended consequences, unintended consequences, and contradictions within and between structures and with practices?
Corresponding loosely-structured interview questions	<p>5.1 Are there any cases where you realised that MarineCo learnt or improved its operations through its cooperation with important parties? Could you think of any examples?</p> <p>5.2 MarineCo is committed to providing services that ensure safety, quality and environmental security. How does this mission influence the way it: a) selects its suppliers, b) coordinates cost efficiencies, c) attracts its customers, and d) achieves higher freight levels?</p>	

Thirty semi-structured interviews were conducted with managers and employees across the organisation's departments⁴⁰. Employees without direct involvement in functions responsible for coordinating IORs were also interviewed, because the researcher wished to get an in-depth understanding of the general dispositions and conjunctural knowledge of these people with regards to the organisation's IORs. Moreover, he pursued interviews with such employees in order to indentify position-practice relations that could provide a broader picture of any connections or interdependencies between MarineCo's IOCM and control practices and its overall control system and agenda.

It is important to emphasise here, that as part of ethical considerations and commitments, the researcher had to reassure interviewees not only that their identity would remain confidential, but also that their responses would not be disclosed to other managers or colleagues at MarineCo, at least in a way that could make the interviewee identifiable. The interviews were conducted in Greek with the exception of three which were conducted in English. Interviews lasted on average forty-five minutes each and were all tape-recorded except for two cases where the interviewees wished that either part or the complete interview were not tape-recorded. All interviews were transcribed and translated by the researcher, as it was very expensive to assign this task to a translator. Besides, it should be acknowledged here that in some cases certain phrases or sentences had to be translated in a way that would make sense to the English-speaking reader. This is because direct translation from Greek to English is not always possible. However, this has not posed a major problem to the quality of the research findings, as the aim was to derive meanings and not to engage with a discourse analysis.

⁴⁰ The interviews' schedule is provided at the Appendix.

While it could be argued that the researcher's engagement with interview translation and transcription may have compromised the reliability of the research, it can also be argued that this personal engagement provided significant advantages to the interpretation of the research evidence. Besides, as Ryan et al. (2002) observed:

“reliability implies an independent, impersonal investigator, and validity implies an objective reality – both of which are likely to be meaningless in interpretive research” (p. 155).

As regards the benefits of self-translating and transcribing the research evidence, it is first argued that the researcher was more capable relative to a professional translator in respect of transferring the context, feelings and jargon of the interviewees to the transcripts, something which is important to an interpretive piece of research, and second, that he benefited from the opportunity of a first reflection and analysis of the interviews. The latter refers to some initial interpretations that involved, for example, writing in parentheses whilst translating the transcripts ‘reflective remarks’ as well as additional information that contributed to a more comprehensive analysis of the interview evidence at a later stage (see Miles & Huberman, 1994, p. 66).

At this point, and with regards to the sources of research evidence collection, it should be noted that attendance at meetings was not allowed, and probably this was because such meetings were taking place to resolve critical upcoming issues that management wished to deal with fast and comfortably without having to consider the presence of the researcher. Therefore, the research evidence collection methods comprised observation, informal discussions, access to archival documents and interviews. In what follows, the focus shifts to another crucial aspect of the research process, which refers to the steps taken to analyse the research evidence and generate findings.

5.3. Research evidence analysis and interpretation

Analysis involves the researcher trying to derive a meaningful account from the research evidence by dissecting that evidence and revealing salient relationships (Miles & Huberman, 1994). In this respect, Ahrens and Chapman (2006) highlighted the importance of systematically linking theory and empirics in the analysis and interpretation of research evidence by arguing that:

“[n]ovices to qualitative field studies may believe that they have great freedom to choose definitions and develop interpretations of their data. In reality, however, the task of connecting data and theory to compelling research questions is a source of great discipline. As a meaningful context that is structured by diverse participants acting within political, economic, social, and material arrangements, the field is not open to the researcher’s favourite explanations” (p. 820).

Following Mason (2002), a starting point was to clarify what qualifies as research evidence for this research before engaging with fundamental aspects of the case analysis. Research evidence constituted not only data gathered from such sources as interviews and documents, but also the personal reflections that emerged and which were recorded throughout the research process. This suggests that the approach taken to ‘reading’ research evidence was not only ‘literal’ but also ‘interpretive or reflexive’ (see also Mason, 2002, p. 148). Besides, Mason (2002) argued that a purely literal reading is not possible, just as a purely objective description of the social world is not possible; a position which is in agreement with the philosophical assumptions of this research.

For Miles and Huberman (1994), coding involves assigning units of meaning with tags or labels to words, phrases, sentences or whole paragraphs with the purpose to “differentiate and combine the data you have retrieved and the reflections you make about this information” (p. 56). Codes, therefore, were used to retrieve and organise the various pieces of evidence in a way that

the researcher could quickly pull them out to answer the research questions and draw conclusions (Miles & Huberman, 1994). Before embarking on a presentation of how codes were created to organise the evidence, it should be acknowledged that “cataloguing or indexing systems are not analytically neutral” (Mason, 2002, p. 148), suggesting that any choice of approach to derive codes to organise one’s research evidence necessarily involves making certain assumptions regarding the kinds of phenomena that one wishes to categorise as well as choice on the form that the research evidence will take when retrieved under these categories (Mason, 2002).

To code research evidence, Mason (2002) argued that one has to keep in mind ‘where do the codes come from’ and what the codes constitute. For this research, Stones’ quadripartite framework and his use of position-practice relations were employed to guide the research and the interpretation of evidence. The codes, therefore, were derived from the constituent elements of the quadripartite framework, namely: external structures to the agent, general dispositions and conjuncturally-specific internal structures of the agent, active agency and outcomes. These codes were then applied to research evidence to distinguish among four categories of IOCM and control, namely: formal IOR cost management practices, informal IOR cost management practices, formal IOR control practices and informal IOR control practices. These categories emerged from the themes identified in the literature review as worthy of further research with the purpose of guiding analysis and interpretation of the research evidence and ultimately of addressing the research questions (see Miles & Huberman, 1994, p. 58). Table 5.2 presents the coding scheme that was employed to index the research evidence.

Table 5.2: The Coding Scheme

Concepts of the Quadripartite Framework	MarineCo and its inter-organisational context viewed from a web of position-practice relations			
	Agents within the department	Agents outside the department but within MarineCo	Agents in relational organisations (e.g. suppliers and customers)	Other significant agents outside MarineCo (e.g. regulators)
External structures	ED	EM	ER	EO
Conjuncturally-specific views	CD	CM	CR	CO
General dispositions	GD	GM	GR	GO
Actions	AD	AM	AR	AO
Outcomes	OD	OM	OR	OO
Categories of IOCM and control underpinning the literature-informed research questions				
1. Formal IOR cost management practices				
2. Informal IOR cost management practices				
3. Formal IOR control practices				
4. Informal IOR control practices				

To give an example of how coding was applied, the researcher's observations of structures as well as the interviewee's reflections of structures enabling or constraining formal cost management practices exercised or influenced by agents within a department were coded ED1. An interviewee's conjuncturally-specific understandings of how those formal cost management practices condition his/her action and/or the actions of agents within his or her own department were then coded CD1. Further, the interviewee's conjuncturally-specific

understandings of how those formal cost management practices are influenced by or influence the organisation's position relative to regulatory bodies were coded CO1⁴¹. These codes were applied to the research evidence while considering the suggestions of Jack and Kholeif (2007) and Coad and Herbert (2009) with regards to the application of the quadripartite framework⁴².

Moreover, prior to applying the codes to the whole set of research evidence, the researcher reflected which codes he would apply to different chunks of research evidence in order to identify any discrepancies arising from applying different codes to the same piece of evidence. While the researcher acknowledges that the coding exercise is inherently subjective, something which is in agreement with the philosophical underpinnings of his research, he decided to engage with this 'check-coding' exercise in order to enhance his familiarity with the codes prior to applying them to the whole set of the research evidence. Another option to assist consistency in the application of codes was to initiate a 'check-coding' exercise with a third person by seeking inter-coder agreement (Miles & Huberman, 1994). However, this was not an easy task to pursue, as the person that could apply the codes should be knowledgeable of Stones' framework, and apart from a limited number of academics, no research candidate of knowledge to the researcher had engaged with Stones' version of ST at the time of the research.

Moreover, following the calls of Humphrey and Scapens (1996) and Ahrens and Chapman (2006) for a flexible application of the theory in interpreting the research, the researcher was cautious to identify whether there were any *in-situ* phenomena emerging from the evidence, which the theory-informed codes could not cover. For example, certain pieces of evidence that referred to the shipping venture's innate characteristics or to MarineCo's corporate

⁴¹ Detailed definitions of each of the codes that were applied in analysis are provided at the Appendix.

⁴² For the suggestions of Jack and Kholeif (2007) and Coad and Herbert (2009) refer to Chapter 3, pp. 112-120.

culture and which impinged on the nature of the organisation's IORs and its IOCM and control practices, but which could not fit to any of the categories applied to the codes, were only attached a code that identified that piece of evidence with Stones' framework, e.g. ED, EM, EO. According to Miles and Huberman (1994), this approach to coding is an indication that [...]

“the researcher is open to what the site has to say, rather than determined to force-fit the data into pre-existing codes” (p. 62).

In addition to the above, the codes assumed clusters of position-practice relations distinguished into ‘agents within a specific department’, ‘agents outside a specific department but within MarineCo’, ‘agents in relational organisations’ and ‘other significant agents outside MarineCo’. The assumption underlying this grouping of position-practices was that an agent's-in-focus conjunctural understandings of the context of action (external structures), as well as his or her general dispositions, action and outcomes are different to those of other agents-in-focus situated within the specific department, within MarineCo in general, in relational organisations and distant institutions (regulators). Such grouping of position-practices is in line with Stones' (2005) prescriptions, as it places the agent-in-focus at the centre of the analysis, while it enables consideration of any differences between an agent's-in-focus undertaking of the duality of structure and the undertaking of other networked agents-in-context.

However, analysis of the research evidence revealed that agents-in-focus within a certain department exhibited consensus on their conjunctural understandings, general dispositions, practices and outcomes (see also Coad & Herbert, 2009) except for a few cases where variability was observed and was attributed to the critical distance that some agents exhibited from their context of action. Moreover, aspects involved in the IOCM and control of supplier relationships, particularly agents' general dispositions, exhibited consensus on an inter-departmental level

covering the supply-involved departments and the Accounts department. Different, however, were the conjuncturely specific understandings of the IOCM and control practices of agents-in-focus who were positioned in different departments. At the same time, dispositions on the IOCM and control of chartering relationships exhibited consensus across the departments engaged with chartering relationships such as Control, Chartering, Operations and Technical.

As a result, the *analysis* of the research evidence, while it was based on the *perspective of each individual agent* with regards to his or her internal structures, external structures, action and outcomes, employed the departmental consensus observed to construct *clusters of position-practices* distinguished according to the department area of the agents-in-focus, for example, procurement-involved departments. In this way, the researcher treated the conjuncturely-specific understandings of agents-in-focus positioned in the same department as well as their general dispositions, actions and outcomes as typical of the conjuncturely-specific understandings, general dispositions, actions and outcomes of the other agents-in-focus positioned within the same department.

The researcher, therefore, employed in his *presentation of findings* clusters of position-practices constructed on the basis of departmental consensus as *the agents-in-focus*. The perspectives of these clusters in turn, were represented from the perspectives of individual agents positioned within these clusters. For those cases, however, where individuals exhibited critical distance from their colleagues' conjuncturely-specific understandings, general dispositions, action and outcomes, the researcher emphasised in his presentation of findings their distinctive contribution to the cluster and the network of clusters. Moreover, the researcher treated agents-in-focus who were positioned outside MarineCo's boundaries largely as third persons through

examining the perspectives of agents positioned within MarineCo and who were coordinating relationships with them. Analysis of the perspectives and practices of agents-in-focus who were positioned outside MarineCo's boundaries as first person was, however, facilitated by the various documents they generated with MarineCo. The researcher employed these documents as proxies to examine their conjunctural understandings, dispositions, actions and outcomes.

At this point it should be remembered that the set of the research evidence comprised a journal and interviews that were both transcribed in Microsoft Word files as well as various organisational and inter-organisational documents that were photocopied. Figure 5.1 articulates the analytical path that was employed to analyse the research evidence. In detail, the *first step towards analysis* of the case evidence involved applying manually the coding scheme (Table 5.2) to the journal, the interview transcripts and, where applicable, to documents with the purpose of deriving reflective remarks that captured emergent phenomena⁴³. Following this, a *second round of analysis* commenced where coded chunks and their associated reflective remarks that were tagged with the same quadripartite element were compared and contrasted with the purpose both of understanding the nature of each quadripartite element *in-situ*, and of identifying position-practice relations.

During this second round of analysis the researcher re-organised the coded research evidence by establishing separate Microsoft Word files for each of Stones' quadripartite elements. In each document he accumulated, from across the set of the research evidence, coded research evidence that was assigned with the same quadripartite element⁴⁴. Then the research

⁴³ Additional remarks during the coding exercise supplemented reflective remarks that were made during the transcription project.

⁴⁴ For example research evidence that was tagged with codes representing external structures (ED1, ED2, ED3, ED4, EM1, EM2, EM3, EM4, ER1, ER2, ER3, ER4, EO1, EO2, EO3, and EO4).

evidence accumulated in each of the Word documents was grouped according to the department of each *individual agent-in-focus*. This procedure enabled the researcher to make comparisons and derive patterns within each Word document that helped to identify both the nature of each quadripartite element and the *clusters of position-practice relations*. The derivation of patterns and the elimination of potential rival explanations were facilitated by the 'Find and Replace' function of Microsoft Word, which was employed to retrieve from within each Word document distinctive words or phrases that facilitated pattern matching of the research evidence.

This procedure enabled the researcher to embark on a *third round of analysis*, which involved deriving meta-codes from the patterns that were identified in the second round of analysis. For Miles and Huberman (1994), pattern coding is a sort of a meta-code that groups the summarised research evidence "into a smaller number of sets, themes or constructs" (p. 69) that in turn provides the basis for answering the research questions. Meta-codes represented summarised research evidence that aimed at illuminating, with the aid of Stones' quadripartite elements, the salient issues and relationships involved in MarineCo's IOCM and control. Then, the meta-codes were further condensed into themes that were formulated as more or less abstract categories to enable the specific, in-situ issues emerging from the meta-codes to flesh the themes out (Ahrens & Chapman, 2006; Miles & Huberman, 1994).

The researcher derived the themes by reflecting on the broader issues that the meta-codes conveyed and by considering how the three Giddensian structures of domination, legitimation and signification underpinned these issues. The three Giddensian structures are conceptualised by Stones (2005) as residing in the conjuncturally-specific understandings of the individual agent, providing a pivot between his or her knowledge of the external structures and his or her action to achieve outcomes. The themes, therefore, reflected on agents' conjunctural appreciation of the

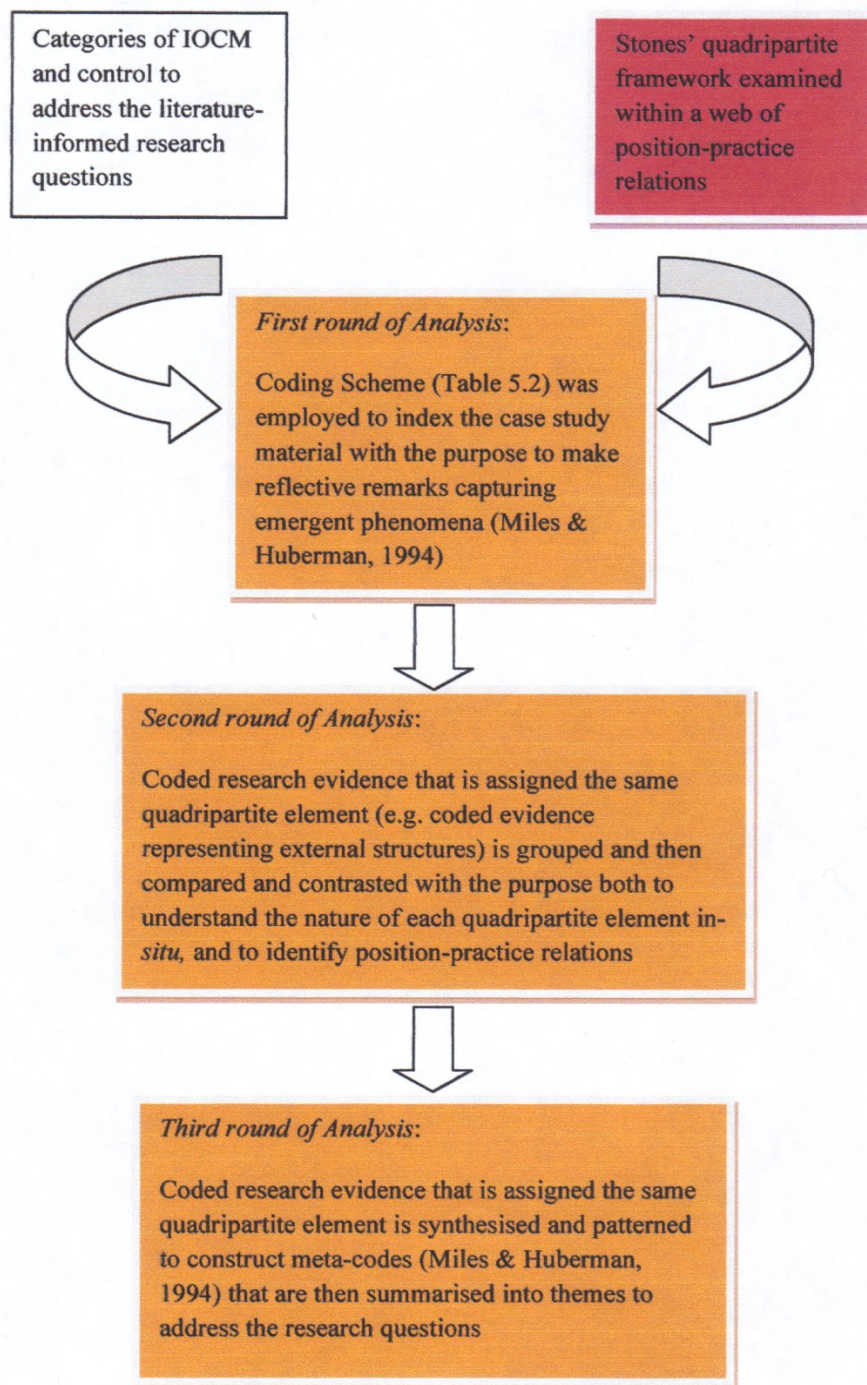


Figure 5.1: The analytical path articulated

structural context as well as their actions and practices. In this respect, the concept of position-practice relations and its contribution to treating the agent-in-focus as both first and third person facilitated the emergence of the themes. This is because appreciation of the three Giddensian structures and their impact on action and outcomes should always take place by considering how other networked agents-in-focus interpret these structures (Stones, 2005). Finally, the opportunity provided by the concept of position-practice relations for treating agents-in-focus as both first and third persons helped examine the themes for rival explanations (Yin, 2003) and for unwittingly relying on selective meta-codes to develop a theme (Miles & Huberman, 1994).

However, discussion of the themes is the subject of the following Chapter where, at the introductory part, arguments are provided to support the researcher's choice to employ the themes as a means to structure the presentation of his findings.

5.4. Criteria for grounding the research

A major aspect of the research process involves the researcher acknowledging the strengths and weaknesses of his research findings, and the procedures that were followed to generate those findings against a set of criteria that have been adopted in his discipline for that purpose. On this matter, Flick (2002) observed that [...]

“[t]he problem of how to assess qualitative research has not yet been solved. It is repeatedly taken up as an argument in order to raise general questions about the legitimacy of this kind of research” (p. 218).

As implied in the above quote, one major issue with case study research involves the explicit and detailed documentation of the research design (discussed in Chapter 4) as well as the research evidence analysis and findings (discussed in Chapters 5 and 6) so that the reader can feel assured of the study's quality.

‘Selective plausibilisation’ or else the ‘it fits, it fits!’ (Vaivio, 2007, p. 438) phenomenon that can lurk in the interpretation of qualitative research severely compromises its results. This phenomenon occurs when the researcher is preoccupied with validating the explanatory capacity of his adopted theoretical framework or with addressing the research questions he has formulated, by selectively choosing that piece of evidence which confirms his theoretical propositions, whilst ignoring those pieces that do not (Flick, 2002; Humphrey & Scapens, 1996).

Yin (2003) proposed four criteria for assessing case study research and, therefore, ascertaining the extent to which it is devoid of the aforementioned weaknesses: construct validity, internal validity, external validity and reliability. He then proceeded to identify a number of case study tactics that can be employed as benchmarks to assess up to what level the research meets each of the criteria. However, the philosophical assumptions underpinning this research do not fit well with the aforementioned criteria and this introduces some scepticism for their appropriateness in this study. This scepticism arises from the fact that the ontology underpinning this research accepts that there is no such thing as an independent objective reality. The researcher is not independent of the research process and his or her perceptions and observations are essential for the application of the theory to ‘explain’ the case (Ahrens & Chapman, 2006; Ryan *et al.*, 2002). In this respect, notions of reliability and validity are not appropriate for case study research in the same manner as they are applied in positive research (Ahrens & Chapman, 2006).

Instead of reliability, the criterion that was employed to protect the conceptual standing of this research is *procedural reliability*. This criterion measures the extent to which the researcher has adopted appropriate research methods and procedures. As demonstrated in this and the

previous Chapter, effort was concentrated towards ensuring that a systematic approach in conducting the case study and analysis of evidence was followed. A systematic approach was first heralded by the fact that a case study protocol was employed to guide the research. Second, evidence of a systematic approach was provided by the detailed presentation of the adopted research strategy and research design, comprising information on the research questions, the selection of the case organisation and the industry, the ethical commitments undertaken, and the methods of research evidence collection adopted. Last but not least, this Chapter presented the process that was followed for the analysis and interpretation of research evidence. In other words, this Chapter along with Chapter 4, aimed at increasing the procedural reliability of the research.

Another criterion, which was employed to assess the research process, is *contextual validity*, which “indicates the credibility of the evidence presented and the conclusions drawn therefrom” (Ryan *et al.*, 2002, pp. 155-156). One way through which this research sought to increase the contextual validity of the research findings, was to compare evidence derived from one method, e.g. interviews with evidence from other methods, e.g. observations, informal discussions and documents. Related to the above, the *triangulation* of research evidence collection methods as indicated in Chapter 4, Section 4.4 (Flick, 2002; Yin, 2003), provided an additional measure that increased the contextual validity of the research.

Further, contextual validity was pursued by confirming with interviewees statements made by their colleagues, while paying attention to not disclose their identities by avoiding mentioning anything that could make them traceable. This helped construct certain patterns that generated themes or meta-codes addressing the research questions. These measures were employed to avoid distortions and reveal potential rival explanations. Another good measure of

contextual validity was also to feedback the case study report to the subjects of study. However, this was not possible because ethical considerations overrode the requirement to strengthen contextual validity, given that the researcher had committed to not disclose any information that could potentially reveal the respondents' identities to their colleagues. Nevertheless, the researcher sought to buffer weaknesses in the contextual validity of his research by first acknowledging the restrictions that applied to it, and which surfaced following his entrance to the site, and second by pursuing a 'check-coding' exercise both on the codes and the themes for rival explanations (Miles & Huberman, 1994).

Overall, Ahrens and Chapman (2006) suggested that a valid qualitative field research is one where the researcher "has developed a convincing account of the ways in which meanings and purposes relate to patterns of activity" (p. 834) by describing thoroughly the phenomena under focus, the processes that brought them to their current status, and the role of context in differentiating their nature. To the authors, a qualitative field study demonstrates validity when it is *trustworthy* and the purpose of this Chapter was to strengthen this study's trustworthiness.

5.5. Recapitulation

This Chapter extended the discussion in Chapter 4 by presenting some issues which unfolded during the case study research and which influenced the research process. These issues resulted in the researcher modifying his loosely-structured interview questions to pragmatically adjust to the circumstances he found in MarineCo. Further, attention shifted to providing both a detailed discussion of the process that was followed to analyse the research evidence, and a list of codes that was employed to undertake the analysis. Finally, the Chapter concluded with a presentation

of procedural reliability and contextual validity as two criteria more relevant for evaluating interpretive qualitative fieldwork. Details of the measures that were taken to ground the research against these criteria were also provided. The following Chapter engages with the presentation of findings, which emerged from the analysis of the research evidence.

CHAPTER 6

FINDINGS FROM RESEARCH AT MARINECO

6.1. Introduction

This Chapter presents findings from case study research at MarineCo, organised according to major themes that emerged from analysis. The themes are the end product of the analytical path presented in the previous Chapter, and summarise the meta-codes that resulted from synthesising and patterning coded research evidence (see Figure 5.1). The analytical path guided, therefore, the development and presentation of findings through important themes which emerged from the analysis and interpretation of the research evidence.

While the themes were the output of an analytical approach articulated by the use of Stones' (2005) quadripartite elements, this Chapter does not adopt the quadripartite framework as an organising approach to present its findings. This is because such an organising approach would involve the compartmentalisation of findings within the elements of Stones' framework introducing, therefore, unnecessary repetitions and overlaps in their presentation. Moreover, the adoption of such a layout would selectively force-fit evidence (see Vaivio, 2007) into the quadripartite elements and introduce divisions in the duality of structure by fragmenting complex phenomena. Besides, Stones (2005) implicitly acknowledges these issues, as he not only argued that the quadripartite elements are inextricably intertwined in practice, but also did not present any of the illustrative case studies he employed to exemplify his framework in a manner which compartmentalises evidence within the quadripartite elements.

Stones' quadripartite elements, therefore, were employed only for analytical purposes, while the themes that emerged from the analysis were used to organise the findings with the aim of highlighting important influences in MarineCo's IOCM and control practices. As discussed in Chapter 5, the themes captured the underlying influences of MarineCo's IOCM and control

practices as these emerged from agents'-in-focus appreciation of the three Giddensian structures, which constitute their conjunctural understandings of the context of action. In this way, the themes accounted for agents'-in-focus conjunctural understandings of the structures of domination, signification and legitimation and the conditions, opportunities and constraints these pose to the outcomes and the very direction of agents' action. This is because the conjuncturally-specific understandings of the agents-in-focus provide a pivot between their appreciation of the external structures and their action to achieve outcomes (Stones, 2005).

The themes, however, represented categories that emerged from not only employing the aforementioned theoretical elements, but also from considering individual agents-in-focus as both first and third persons, through what Stones (2005) calls a 'composite study'. In this respect, the contribution of position-practice relations in deriving the themes was pivotal because it facilitated approaching individual agents as both first and third persons whose conjunctural understandings, general dispositions, actions and outcomes were conditioned by how other networked agents appreciated the three Giddensian structures. The treatment of individual agents-in-focus as both first and third persons also contributed to surfacing consensus on a departmental level, something which the researcher employed to construct *clusters of position-practices*. These clusters were employed, as it was discussed in Section 5.3, as *the* agents-in-focus to assist the presentation of findings. While Stones (2005) does not clarify whether a cluster of position-practices can be employed as the agent-in-focus, he implicitly adopts clusters of position-practices as his agents-in-focus in some of the illustrative case studies he includes in his book. However, the perspectives of those individual agents which differed substantially from the perspectives of their department were highlighted in the findings. Moreover, the researcher treated agents-in-focus

who were positioned outside MarineCo's boundaries largely as third persons through examining the perspectives of agents positioned within MarineCo and who were coordinating relationships with them.

In particular, the identified network of position-practice relations indicated that rather than the predominantly co-operative IORs that had been described on the company's web pages, in company accounts, and by senior managers during a preliminary visit to MarineCo, IORs with suppliers and customers were predominantly arm's-length, and based on competitive assumptions. Exceptions were a few cooperative initiatives with charterers and some joint venture (JV) arrangements. The research highlighted that MarineCo's control systems underwent a number of changes that aimed at establishing and formalising existing management controls to ensure operational excellence and cost efficiency in IORs. Landmarks that stimulated this effort were:

- The acknowledgement in early 90's that suppliers had taken the organisation for granted due to its lack of appropriate inter-organisational controls;
- Revelations in early 90's that supply managers were involved in fraudulent action with certain suppliers;
- The compulsory compliance with the ISM Code in 1998;
- The commitment to adapt operations with changes in industry practice, e.g. by obtaining ISO (International Standards Organisation) accreditation in 1996, complying with oil-major's TMSA (Tanker Management and Self Assessment) in 2003, and adopting the prescriptions of industry publications of 'best practice';
- The adoption of HERMES information system in 2002;

- The establishment of the Checking office in 2004, and finally
- The statutory requirement to comply with the SOX (Sarbanes-Oxley) Act in 2008.

The above landmarks coupled with MarineCo's paternalistic management structure and institutionalised practices in the shipping industry encouraged the adoption of a predominantly arm's-length approach to the management of IORs. These landmarks emphasised *power asymmetries* not only between MarineCo and its suppliers and customers, but also within MarineCo itself. A related issue was the evident *distrust* by top management of MarineCo managers and their relationships with suppliers. Power asymmetries and distrust suggest a role for structures of domination, which refer to the power of agents-in-focus to manage authoritative and allocative resources relative to that of other agents-in-context. Furthermore, new technologies and control functions as well as industry practices coupled with regulatory requirements significantly influenced the organisation's IOCM and control practices, emphasising a role for signification and legitimisation structures respectively. This is because these themes contributed to the generation and communication of meanings, sanctions and expectations as to what constitutes meaningful and legitimate practice of IOCM and control. All these influences were major themes that emerged in the ebb and flow of position-practice relations, whose major clusters are outlined in Figure 6.1.

Figure 6.1 represents *clusters of position-practice relations* that emerged from the analysis of the research evidence (second round of analysis; see Figure 5.1). These clusters highlight the stakeholders who influenced directly or indirectly MarineCo's IORs and their cost management and control and who are positioned both within and outside MarineCo's boundaries, extending beyond its relationships with suppliers and customers. The double-arrowed and

unidirectional links between the clusters depict mutually reinforcing and constraining formal and/or informal relationships that highlight how the aforementioned themes emerged and played their part in MarineCo's IOCM and control practices.

The Chapter presents the important themes influencing MarineCo's IOCM and control as outlined above in the following sequence: Section 6.2 deals with the role of power asymmetries between MarineCo and its suppliers and customers. Section 6.3 deals with power asymmetries within MarineCo and distrust by top management of MarineCo managers and their management of supply IORs. Section 6.4 then deals with the influences of new technologies to MarineCo's IOCM and control practices, while Section 6.5 deals with the influences of regulatory requirements and industry practices on MarineCo's IOCM and control. Finally, Section 6.6 provides some concluding comments that form the basis for initiating a discussion in Chapter 7.

6.2. Power asymmetries between MarineCo and its suppliers and customers

Research at MarineCo revealed that the IOCM and control of relationships with suppliers and customers was conditioned by power asymmetries between the parties.

6.2.1. Power asymmetries in relationships with customers

The research revealed relative domination by customers, i.e. the chartering companies, in their relationships with MarineCo:

“Charterer oil-majors expect and in fact demand increased asset-specific investments on our behalf without, though, contributing to share part of [the cost of] these investments” (Technical manager).

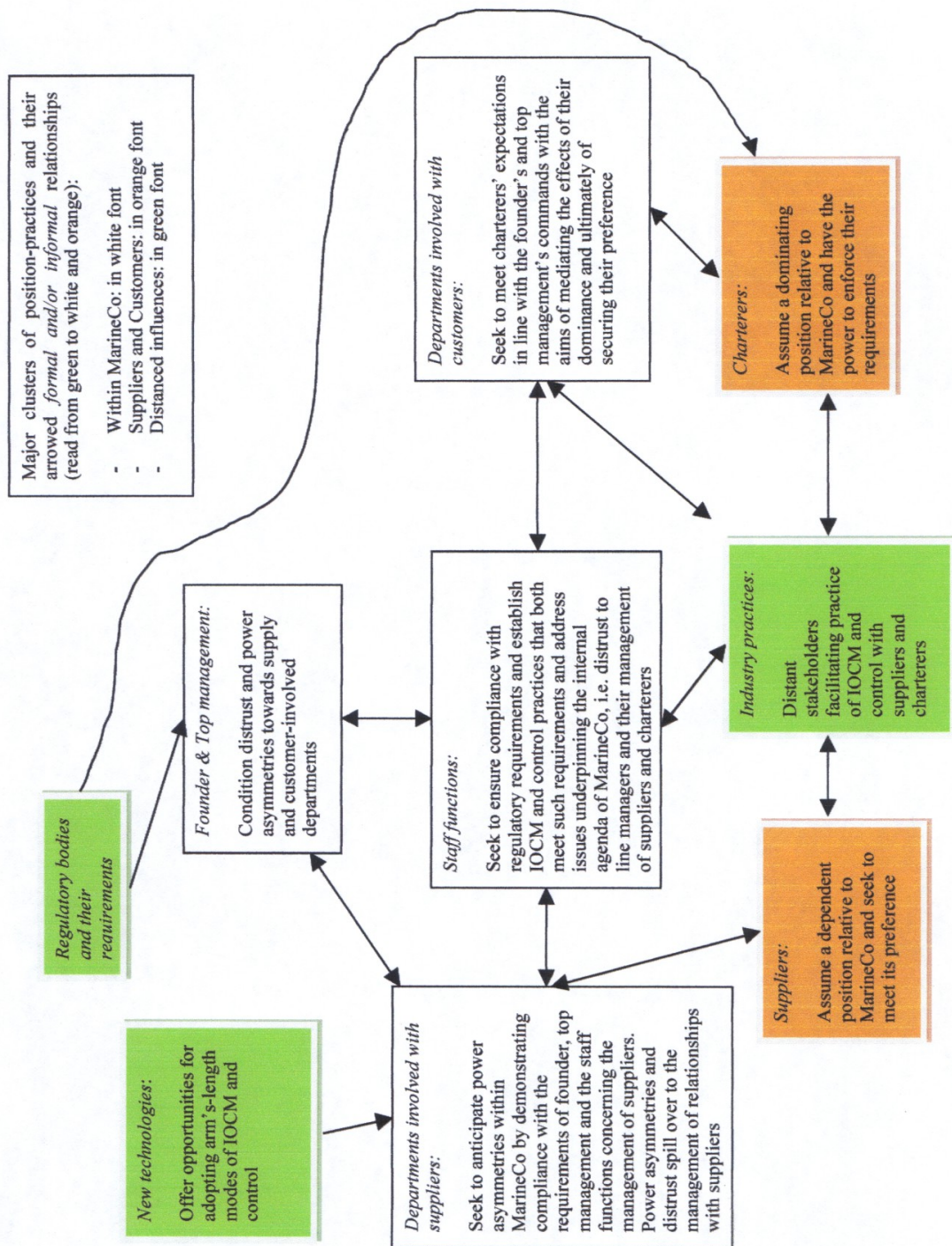


Figure 6.1: A representation of major clusters of position-practice relations within and outside MarineCo

Interviewees emphasised the importance of taking initiatives and employing management controls that ensure MarineCo's viability in a competitive and highly regulated business environment. Agents across MarineCo acknowledged its dependence on charterers and this was the main principle that underpinned top management's approach in pursuit of the organisation's chartering strategy.

In particular, top management and agents involved with charterers argued that MarineCo can manage its dependence on charterers only when it satisfies over-and-above their requirements and demonstrates its compliance with national and international regulations for secure and environmentally safe services:

“We ‘build’ on their requirements, we ‘build’ on what they ask us do, because we believe that we may need the knowledge acquired from our efforts to meet their requirements in the next 4 years let's say” (Chartering manager, Chartering).

Moreover, they acknowledged that the charter parties, i.e. contracts, they agree with them reflect MarineCo's dependence for the contracts stipulate the organisation's commitments that must not be breached:

“We place prime importance into meeting charterers' needs and requirements as these emerge from the charter parties we sign and agree” (General manager).

At this point, however, agents involved with charterers were also confident MarineCo's size and reputation enables them to anticipate charterers' requirements, and therefore, to manage its dependence. To them, size and reputation not only establishes an attractive profile for the company, but also assists chartering managers to negotiate higher freight levels and even establish long-term relationships and JVs with mutually beneficial financial arrangements.

“It is for sure that due to the size of the company, we will manage to agree the best freight levels as compared to other companies because of the high standards of the vessels we

provide and the very good reputation we have established in the market” (Handler, Control).

State-owned oil companies “prefer to share a vessel’s ownership with people they have worked together in the past, who are experienced and reputable in the area of shipping. Moreover, they want to benefit from profit sharing agreements, meaning that part of the money they give in the form of hire will return to them and their countries” (Chartering manager, Chartering).

To meet charterers’ requirements, MarineCo developed a set of formal and informal IOCM and control mechanisms that while aimed to ensure customer satisfaction, also sought to curb, even temporarily, dependence on charterers and the constraining forces of abstract and distant structures, e.g. freight market volatility, as reflected in market reviews provided by independent market analysts. In this respect, the general manager and agents involved with charterers argued that profit sharing agreements and informal controls establish a climate of reciprocity with charterers. These controls represented revenue management and relational control tools MarineCo practised in its contractual agreements with charterers that promoted the organisation’s profile, while preventing adverse consequences in case of MarineCo’s underperformance, as will be explained, below.

In detail, as part of formal IOCM practice, MarineCo is one of a few companies to have adopted profit sharing agreements since 1993. Profit sharing offered a major revenue management mechanism to MarineCo and cost saving opportunities to charterers. As a result, an increasing number of charterers were inclined, following the vetting inspections they undertake before approving a vessel for charter, to approve MarineCo as their carrier. The general manager argued that charterers appreciate in profit sharing the option of securing up-to-a-certain-level hire payment against the cyclicity of the shipping market, while MarineCo benefits from asset utilisation and secured minimum cash flow for a long period of time in a highly volatile market.

Profit sharing agreements, therefore, anticipated to the benefit of the organisation the potentially adverse influences of freight/hire volatility as reflected in the rate assessments provided by market analysts, while they also mediated MarineCo's dependence on charterers through motivating the latter to enter into a charter party. This hedging facility of profit sharing was particularly important for MarineCo, because when a shipping organisation enters a charter party, a vessel's operating expenses are not actively considered in the formula for the calculation of hire with the result that, in periods of economic downturn, ship-owners could be forced to squeeze their expenses or their profit margins. The Chartering manager commented in this respect:

“We know what the operating expenses are, but this knowledge is not important to us at all, because what we look at, even for voyages in the spot market is the time-charter equivalent as obtained from World Scale [...] and, therefore, my point is that [its] conversion is not influenced from what a vessel's expenses are; of course expenses determine the profit, but this is an issue of concern to other departments as to why a vessel's expenses are \$12,000 per day when it could be \$6,000, for example [...] There is a certain market that operates on the basis of supply and demand.”

Profit sharing, therefore, protected MarineCo's profit margins because it performed as a hedging mechanism, which guaranteed a minimum hire when the freight market dropped, while it benefited from any resurgence. Hedging was achieved through agreeing with the charterers a minimum level of hire and sharing any excess, as driven by market trends, on the basis of a mutually agreed ratio. The minimum level of hire agreed should provide for a profit given chartering managers' projection of the vessel's budgeted expenses, while the determination of the ratio for sharing any extra hire depended on the minimum level of hire MarineCo was willing to accept. MarineCo was likely to ask for a higher portion of any excess hire in case it accepted a minimum closer to the low end of the prevailing freight range as compared to accepting a minimum closer to the high end of the range. Therefore, the specification of the ratio for

apportioning any excess over the minimum hire did not relate to some sort of resource contribution or payback relationship:

“As regards ratios for profit sharing [...] we can be as much creative as we wish [...] it depends on the deal, for example, it could be agreed that on any hire above \$36,000 and up to \$46,000 the owner receives 60%, whilst the charterer keeps 40%, and then for a hire from \$46,000 and up to \$56,000 the owners receives 40% and grants the charterer 60%; it depends on each party’s appetite” (Chartering manager, Chartering).

Overall, however, agents involved with charterers observed that MarineCo’s capability to enter into long-term charter parties and profit sharing as well as to benefit from opportunities of joint vessel ownership hinged on it meeting charterers’ requirements and guidelines. In this respect, they saw deployment of informal controls to establish reciprocity as crucial, because they argued that personal relations and goodwill could mediate MarineCo’s dependence and increase chances of favourable treatment by charterers in case of underperformance at a specific instance:

“When there is a long-term co-operation and friendship with a charterer, the problems that may emerge will always be solved through mutual concessions and co-operations” (Handler, Control).

Informal controls enabled MarineCo to build a climate of understanding on behalf of charterers who could then, without immediately proclaiming the vessel off-hire, grant sufficient time to the organisation to resume operations following, for example, an unexpected delay. Such controls involved operating beyond the terms of the contract, e.g. accepting to bear costs that the charterers were contractually bound to bear or taking measures to prevent anomalies in the efficient management of the charter party that could have adverse financial effects on both parties:

“[A] charterer is interested in the flexibility of the relationship. What do I mean by this is that when we have a chartering agreement, and suddenly a need or opportunity arises for the charterer that is not though provided for in the charter party as a contractual obligation of the owner to help, it can very well be, that if the owner decides so, that we respond to their special request [...] We ‘build’ relationships that may extend not only beyond the

agreed contractual terms, but also beyond the custom of trade” (Chartering manager, Chartering).

“As regards long-term relationships with charterers it is a matter of public relations [...] we will do something for them that is outside the provisions of the charter party, but at the same time we expect from the charterers to try and find a solution in case something happens in the future and which breaches the terms of the agreement” (Husband Captain, Operations department).

Informal controls, profit sharing agreements as well as the organisation’s high reputation in the market were also reported by agents at MarineCo as encouraging the development of JV relationships with a few charterers where the organisation occupied a dominant position relative to its partners/customers. Previous experience between the parties, access to new markets by MarineCo, lack of marine expertise by oil-major organisations as well as mutually beneficial opportunities for profitability were the main reasons that motivated the latter to enter into JVs:

“[T]hese companies who enter into the shipping venture, were in fact our customers, and have little experience in running a big fleet so they trust us to have the technical and operational responsibility of the joint vessel, an area which is quite new to them. With these companies we used to agree spot voyages and time-charters of smaller duration for the past 20 years... and this is where the relationships built upon” (Chartering manager, Chartering)

Nevertheless, despite the positive influences of profit sharing agreements and informal controls in strengthening MarineCo’s position relative to charterers, ‘when profit was at stake’, the parties were resorting to the terms of the charter party to protect their interests, and MarineCo should be in a position to defend itself against charterers’ threat of penalties. For example:

“Now in some other situations, in order to avoid a delay that could occur due to our fault then, yes, they can do something, but if the delay takes place, it is money. Researcher: So all the coordinating and cooperating efforts take place up to preventing... HC: Preventing something from happening, but if something happens they stick to the rules, to the charter party agreed, as we do to protect the company’s rights” (Husband Captain, Operations).

“[W]hen there is a delay, the vessel goes off-hire, they do not play; look these are two different companies, and both of them pursue profit” (Husband Captain, Operations).

“Now when something occurs with profit being at stake, we do not expect any benefits in this respect. Researcher: So, there is no cooperation here? HC: No, it is money that matters in this case (Husband Captain, Operations).

In what follows, discussion considers how power asymmetries between MarineCo and its suppliers influenced the IOCM and control practices it employed in its IORs with them. Dependence on charterers and the primacy given by agents at MarineCo to the smooth execution of the charter party conditioned agents’ practice of IOCM and control with suppliers as well.

6.2.2. Power asymmetries in relationships with suppliers

In contrast to its relationships with its customers, MarineCo tended to dominate its relationships with its suppliers. It emphasised this dominance by insisting that suppliers engage in competitive bidding to obtain contracts with MarineCo. In particular, procurement-involved agents shared the view that competitive bidding generates cost efficiencies and motivates suppliers to improve their offerings, while it benefits MarineCo in terms of maintaining alternative supply options.

“[W]e do not use only one ship chandler or what we call supplier [...] According, as well, to our policy we need to ask for quotations from at least three of them” (Handler, Procurement)

“By saying that we have long-term cooperation with the service providers this does not really mean that they are getting a business exclusively. They know that they will have a fair competition and that we do not solely rely on them” (General manager)

Procurement-involved agents suggested that their duty is both to maintain the fleet fully operational to meet charterers’ requirements and to ‘send suppliers the message’ that they have to compete with others before they succeed to receive an order. Besides, they acknowledged that MarineCo’s commitment to the smooth execution of the charter party influences the nature of the supply IORs they pursue and the IOCM and control practices they employ. For example, the cost

management of suppliers critical to the smooth execution of the charter party, such as spare parts makers, was directly conditioned from the urgency of the procurement:

“[F]inancial considerations in the procurement cost of spares [...] are not prime; the priority is to fix the damage as quickly as possible in order to avoid delays in the vessel’s schedule and exposure to the charterers with adverse economic consequences” (Spares manager)

The unhindered operation of the vessel to avoid penalties, e.g. disruption of hire payment, not only from charterers but also from regulators such as Port State Controls and classification societies was a major principle that conditioned order allocation to suppliers at MarineCo. Moreover, procurement-involved agents stated that cooperative supplier relationships and scope for mutually beneficial IOCM depend on the frequency with which these relationships are employed, something though that is determined by factors exogenous to MarineCo’s direct control. This is because the trading routes of MarineCo’s vessels, which dictate which suppliers are to be employed by virtue of the ports at which a vessel calls at, are determined by charterers and may change more or less frequently, depending on the type of the charter party.

“Well the relationship could endure throughout the duration of the time-charter, and for further time-charters... there are agents [i.e. suppliers] with whom we work together for years now, and this applies mainly for trading routes that are of strategic importance to the company... in these areas we employ agents we have worked with many years ago” (Handler, Control)

Therefore, the cost management and control of supplier relationships also hinged on MarineCo’s commitments to charterers. In this respect, the general manager observed that in order for MarineCo to have more than one supplier option to meet its vessels’ operational needs, and safeguard its position relative to the charterers, it has to adopt an approach to IOCM, which combines competitive-bidding with a ‘fair’ apportionment of orders through a rank-based evaluation. On the avoidance of dependence, and the need to maintain competition, the general manager argued:

“We are always trying to allocate business, spread the business in a way that suppliers can expect to get business”

Similarly, the bunkers’ manager observed that even if a claim or a dispute arises, it has to be very severe for them to terminate the relationship, as it is not in MarineCo’s interests to reduce its available supply options:

“[W]e are not allowed to act in this way, it can happen that one day we may need them”
(Bunkers’ manager)

These views on the management of IORs with charterers and suppliers, which also reflected the founder’s perspective, were also evidenced in procurement-involved managers’ discourses:

“MarineCo should never, ever rely on unique suppliers, because monopoly is the worst scenario that can take place in a commercial relationship [...] if we tie up too much in a long-term relationship with a provider of chemicals, lubricants, paints etc., then they may under-perform; why? Because they think they have secured our preference” (Procurement manager)

“In general, practice has proved that to commit to one supplier is not correct, because if you think of it today it is Hyundai, but tomorrow it can be somebody else from where we can get the same product for a better price. Why should we commit ourselves to one maker then?” (New-buildings manager)

Multiple sources of supply, therefore, emerged as a major principle underpinning IOCM and control practice of MarineCo’s procurement-involved departments. Observation of procurement managers’ action, however, highlighted occasions where instead of conducting a competitive and rank-based apportionment of supply orders, they constantly appointed certain suppliers. Procurement managers used those suppliers’ performance as a pretext to rationalise and confer legitimacy to their actions, which deviated from the prescribed IOCM procedure that involved receiving quotations from at least three suppliers and performing a comparative exercise while considering a fair allocation of orders. While top management was concerned with this

behaviour, it did not ask procurement managers to resume their conduct to the prescribed practice.

Despite the aforementioned deviations from the procedure, unique relationships were perceived as dangerous because of the asymmetric dependence that could arise and because of the potential inability of the unique supplier to meet specific orders at a specific point in time. In those cases, however, where agents involved with suppliers had no other option than to resort to a unique supplier or where the nature of the required supplies was critical, e.g. IORs with port-related service providers such as ships' agents, tug and mooring suppliers, they were adopting contracts to cost manage the relationship. Contracts were seen as preferable in those circumstances because MarineCo could achieve some sort of binding with the supplier and manage dependence through increasing the predictability of their behaviour. For example, the general manager and a procurement handler observed that in critical supplies contracts are preferable:

“[B]ecause we secure better prices” (General manager), and because “contracts ensure stable, predictable prices” (Handler, Procurement).

Even in those cases where a contractual relationship was established or renegotiated, however, a competitive search of the market preceded initiation of the contract:

“[A] market review must take place to compare among the best available offers and exercise pressure on the suppliers” (Handler, Control).

Besides, the potential to adopt cooperative IOCM techniques to introduce openness in the management of costs with suppliers was either denied or ignored. For example, when interviewed, the general manager mistook the concept of open-book accounting for the detailed pricing that suppliers submit prior to being assigned an order. In contrast, a cost

estimator, who had good understanding of open-book accounting, argued that it is ineffective for managing ships' repairs. He explained that shipyards have no incentive to disclose their profit margins and that in case they do these are most likely underestimated in order to defend their pricing to MarineCo.

Apart from employing formal IOCM and control practices, however, to manage dependence, agents in Procurement as well as in Accounts and Checking argued that 'size matters' and that in conjunction with reputation it enables MarineCo to assume a dominant position relative to its suppliers. For example, procurement staff frequently deployed informal cost management initiatives, e.g. imposing on suppliers to accept reduced prices, while expecting them to offer the same discounts and credit time [...]

- "given the reputation of their customer [i.e. MarineCo] and the prestige, privilege and safety that suppliers get from working for MarineCo" (Procurement manager).
- because "in such a big company with such a turnover generated from operations in all over the world, you can demand those who work with you to strictly follow your commands" (Procurement manager).

Further, a popular informal control employed by procurement managers was to 'freeze' orders for a certain period of time to those suppliers who behaved opportunistically in order to demonstrate zero tolerance to such behaviour.

While this dominating perspective in the management of supply IORs was observed in the daily practices of the above groups of agents, the accounts manager and agents involved with critical suppliers (e.g. spare part makers and bunkers' suppliers) emphasised a role for informal controls to promote reciprocity. These agents viewed goodwill and contractual trust, including long-term cooperation and bonds of friendship, as important to facilitate operations, prevent

adverse incidents or resolve any claims that could hamper the smooth management of the relationship. For example:

“A relationship makes sense only when we experience special circumstances. And what do special circumstances mean? It can be that we are in urgent need to procure oil at a certain port where however, there is congestion. So in this case, if you cooperate with a bunkers’ supplier for many years, you will ask them to make their most and procure your vessel at short notice [...] Another example is when we have to make a claim, because claims can also take place” (Bunkers’ manager).

These agents perceived mutuality to materialise in supply IORs, in terms of not only relational benefits accruing to suppliers such as prestige from doing business with MarineCo, but also financial benefits through receiving large volume orders. At the same time, they expected suppliers to appreciate MarineCo’s ‘generosity’, and respond with good quality products and services at competitive prices.

6.3. Power asymmetries and distrust within MarineCo

The preceding Sections highlighted power asymmetries between MarineCo and its suppliers and customers which influenced the nature of its IOCM and control practices. The practices were predominantly arm’s-length. However, they were supplemented by some cooperative arrangements depending on MarineCo either assuming a position of domination or dependence. Apart from power asymmetries outside MarineCo, however, there have also been power asymmetries and distrust within the organisation which had implications for IOCM and control. There follows discussion of these factors.

As mentioned previously, MarineCo largely retained its family structure, despite it being listed on a stock exchange. The founder of MarineCo adopted a paternalistic approach to management where distrust and a lack of authority delegated to employees were emphasised by

him acting as a gatekeeper, who retained the authority to ratify the vast majority of major decisions taken with regards to suppliers and customers. He also took every opportunity to reinforce a cost stringent perspective which, when combined with his active intervention at all levels of management, reproduced distrust between departments and top management.

Within such organisational context, revelations in the early 90's that MarineCo's own procurement staff had engaged in fraudulent action in cooperation with certain suppliers produced and reproduced distrust within MarineCo. Fraudulent action in conjunction with increasing acknowledgement that suppliers were taking MarineCo for granted by sending over-priced invoices, spurred an outcry for radical change in the approach for managing supplies. Immediate action was taken by top management and the founder to appoint a new procurement manager to rationalise the procurement process and restore an element of trust in the systems, if not in the people involved:

“when I made an audit in a sample of procurement purchases amounting to 7,000,000 drachmas I realised that the real cost was 300,000 drachmas [...] and I wonder, without really wanting to blame somebody, was this only a cheating “job” of the ship chandlers? Did they do it all on their own? Were they that much canning and brave? No, it cannot be that, they were aided from people in here [...] Was it only my predecessor who “played” or were there also the husband captain and the husband engineer who also played their part? And what about the master and the chief engineer on board? Didn't they “play” as well? Therefore, the remaining 6,700,000 were shared among these people” (Procurement manager)

“it was a very difficult endeavour, from 1992 till 1996 we still hadn't re-established the full array of supplier relationships we needed, and why that? Because the suppliers knew that this is a company with no controls in place, a company that cannot protect its interests and boundaries, so they were supplying vessels and after that they were charging whatever they wished at whatever prices” (Procurement manager)

Under calls for radical change of their practices, procurement agents were forced to comply with requirements for scrutinised review of vessels' requisitions and to request suppliers to submit detailed quotations for competitive benchmarking as they had to convince management that they advocated the organisation's efforts to restore ethics. However, resistance to these efforts was exhibited by suppliers who were used to dealing with MarineCo without being overly monitored for their pricing and quality of offerings. As the procurement manager suggested, they had to 'fight' to coerce suppliers to submit quotations because some threatened to refuse the supply of the organisation's vessels. That was a time where MarineCo strived to obtain control of its relatively few suppliers who were used to assume a dominant position against an 'easy' customer.

"So do you know what these people [ship chandlers] did when I told them that they will receive no further order prior to submitting their prices? They did not supply one of our vessels that were calling at an English port, they left the vessel without provisions, they did not even supply tomatoes or bread [...] The vessel was calling at Gibraltar; [there] we asked for quotations but we received none because all these guys with who our department was making business with were not used to submitting quotations. The way things worked was that provisions were delivered to vessels and then, after 2 days the prices were sent to the office... and to be precise it was not prices that we were receiving, in fact it were invoices" (Procurement manager)

The aforementioned experience, in conjunction with a paternalistic structure at MarineCo where the founder constantly monitored managers and their management of IORs institutionalised power asymmetries and distrust not only within MarineCo, but also outside its legal boundaries. In detail, top management was accountable to the founder and were acting on his behalf maintaining high on the agenda the basic principle underlying his mission for

MarineCo, namely: achievement of cost efficiencies, while giving primacy to meeting charterers' concerns in line with industry best practice and opportunities for expansion⁴⁵. For example:

“[W]e need a procedure where decision-making is not only based on cost considerations or on the short-term commercial side of the business, but where decision making is based on your ethics, on your goals, and what is our goal? Our goal is to carry really dangerous cargos in a safe and environmentally friendly way [...] because otherwise you wouldn't be able to stay in business, isn't that so? Your reputation would be at stake and you may harm the people on board” (Chief Marine Officer).

“[A] long-term relationship must be subject to constant monitoring and review, because if no control is exercised it is likely that it may no longer be beneficial” (Internal auditor).

Efforts for achieving cost efficiencies were directed, among others, in taking all necessary measures to eliminate opportunistic behaviour and inter-connected interests between MarineCo managers and suppliers. Following revelations of fraud, procurement-involved staff were expected to prove objective and ethical conduct by applying controls based on a competitive/comparative perspective. Particularly for relationships with suppliers, the chief marine officer observed that ethical conduct should be self-evident, while the general manager argued that procurement-involved managers should not necessarily opt for the cheaper supplier even though the prescribed cost management practice relied on a competitive-based approach. This is because the cheapest quotation could conceal a 'hidden' relationship of inter-connected interest between the supplier and a procurement handler:

“So if there is a supplier who always offers for \$5,000 less than others, it doesn't really matter, it doesn't automatically entitle them to get the order. We make sure they realise that and we allocate business at our discretion. In this way we try to eliminate the prospect of somebody within the company knowingly giving out price information from one supplier to another telling them “offer for \$2,000 less and you get the order”... no, this is not the case” (General manager).

⁴⁵ While the founder was not interviewed, the researcher employed his own experiences with the founder obtained from personal observations and discussions, as proxies to sketch his phenomenology with all its values, concerns and priorities.

Apart from top management, distrust in the management of supplier relationships and to suppliers was also prevalent in MarineCo middle-level managers following the revelations of some suppliers receiving preferential treatment from certain managers. For example:

“[W]hen the commercial department of a supplying company presents you with a new suggestion, it seeks to hide the disadvantages and to highlight the advantages [...] I have elaborated on the disadvantages of these relationships because we don’t have any examples yet, which in a free market is perfectly acceptable [...] We do have cases where in a very tight relationship and despite the established agreements, the other party is trying to get more money from you” (Technical manager).

“[F]rom a financial perspective long-term relationships are costly because through personal relations and long-term relationships it is likely that inter-organisational costs will rise, and that part of this cost will benefit the ‘purse’ of a good manager in here” (Husband Captain, Operations).

Further, distrust in the management of supplier relationships was reinforced by internal auditors, who acted as watchdogs of compliance by managers involved with suppliers and customers of the internal and inter-organisational control procedures. Particularly with regards to supplier relationships, auditors posited that IOCM and control can only be trusted to be ethical and undisputed when it is based on a competitive-based procedure. The internal auditor reported in this respect that whenever an internal audit of the IOCM and control practice is performed, two questions need be addressed:

- “Has competitive bidding been employed for this transaction”?
- “Is the procurement procedure ethically followed for this transaction”?

Auditors, in line with the views of top management, argued that a competitive-based approach ensures that allocation of orders to suppliers is not based on ambiguous procedures, where kinship with the procurement staff can allow room for ‘hidden’ commissions, but on ‘objective’ criteria such as cost, quality and availability according to which a number of suppliers can be benchmarked.

“[T]he service providers are evaluated every year and obviously unless they provide the service you expect them to provide, they are not offered a blank cheque. But the interaction between them and us over the years obviously assists them to understand what we require and assists us to appreciate the service they provide. So there is not a fixed contract that we have. On the contrary, we expect from a long-term provider to have a much better offering than a newcomer in terms of service, performance and cost” (General manager).

The need to prevent fraud at MarineCo was frequently mentioned by agents involved in the accounting and procurement-involved departments, perhaps in order to justify their inclinations on the avoidance of intimate, long-term relationships and the adoption of an approach based on competition. For example:

“[T]he option to transact at arm’s-length through the internet is more cost effective” (Husband Captain, Operations).

They argued that an arm’s-length approach could meet concerns for transparency, and that informal controls such as trust, reciprocity and friendship, while important, were not sufficient for the coordination of MarineCo’s IORs. Formal controls should be there to ensure that MarineCo is not exposed to opportunistic behaviour even though, according to the internal auditors, there were cases where MarineCo had no other option than to trust its partners when there were no formal controls available to monitor their performance or when these were very costly to implement.

As part of top management’s and Internal Audit’s efforts to address distrust in managers’ coordination of supplier relationships, new technologies and control functions were introduced, which further embedded an arm’s length-perspective and institutionalised power asymmetries not only within MarineCo, but also with suppliers. The influences from the introduction of these technologies and controls, however, are discussed in the following Section.

6.4. New technologies and controls at MarineCo

The introduction of HERMES and the Checking Office represented significant landmarks in the development of new technologies and controls affecting both intra- and inter-organisational relationships. HERMES, was introduced at MarineCo as an integrated management accounting system. Apart from providing a budgeting interface for the organisation, it reinforced a competitive-based approach and it contributed transparency and accountability to the management of supply IORs. HERMES increased monitoring of managers' actions, and therefore, addressed the distrust by top management of MarineCo managers, through establishing a reporting bureaucracy that maintained power asymmetries within the organisation.

In particular, procurement-involved agents suggested that HERMES enabled them to process order allocations through a standard basis upon which all quotations could be compared, while eliminating the scope for suppliers to mislead them in terms of the quality of their offerings. Protection from suppliers' opportunistic behaviour was important to procurement agents because they had to provide adequate justification for their decisions to Internal Audit, husband captains and husband engineers, particularly with regards to adverse variances between expenditure incurred and that which had been budgeted.

A major outcome from HERMES' implementation was, therefore, the standardisation of the ordering procedure and the elimination of intended or unintended mistakes from suppliers, the procurement staff or the crew. Standardisation established competence and goodwill trust within MarineCo as regards the management of supply IORs and mediated suppliers' opportunism:

“As far as I am concerned these procedures [i.e. procurement through HERMES] are there to increase our accountability to either top management or auditors to whom we are

responsible to demonstrate how we really operate [...] Because suppliers also have as an ultimate goal the achievement of profit, before the introduction of HERMES, they were making every effort to confuse us [...] In the past, however, if suppliers tried to cheat in 80% of transactions, I would say that this percentage has dropped to 20% since the system's introduction”.

Increased monitoring of suppliers, their limited scope to behave opportunistically and the accountability of the procurement staff were subsequent outcomes, therefore, of the standardisation introduced by HERMES. Overall, the system reinforced beliefs by procurement managers that supplier relationships should be cost managed and controlled through arm's-length, transparent procedures that would eliminate incidents of fraudulent behaviour.

In addition, the introduction of the Checking Office was also designed as part of the efforts to eliminate fraud. Its mission, however, was not only to address distrust within MarineCo by monitoring whether procurement-involved staff abided to the prescribed IOCM and control practice, but also to signal to suppliers, through performing a cross-checking of their invoices, that MarineCo would not accept opportunistic behaviour. However, the checking procedure had unintended consequences because it caused delays in the settlement of suppliers' invoices. Checking handlers had to obey to the instruction of the founder to defer payment of suppliers' invoices even for those cases where there was a few cents difference between the invoice and the agreed supply cost recorded in the 'job order'. As a result, the invoice reconciliation process became too time-consuming and suppliers started sending reminders to MarineCo requesting immediate payment and threatening to take legal action. Under these circumstances, the checking function appeared to reproduce distrust not only from suppliers, but also among the procurement-involved departments. Delayed invoice reconciliation from the checking function hindered procurement-involved staff's efforts to pursue cost beneficial arrangements in terms of

preferential discounts, rebates and credit time, particularly from those suppliers who possessed relative power due to their strategic importance to MarineCo, e.g. spare parts makers.

Whereas the accounts manager prioritised payments to suppliers who would not tolerate unjustified delays, handlers from Checking and Spares argued that the majority of invoices were processed with considerable delays. Adverse consequences to MarineCo's reputation and in its potential to achieve beneficial deals with suppliers created uneasiness into managers, who though reacted in different ways. For example, the procurement manager argued that the practice of discretionally prioritising payments is arbitrary and does not resolve the issue, while the general manager suggested that it is the ineffective communication between Checking, procurement staff and the fleet which is responsible for the delays. On the contrary, the internal auditors observed that the invoice reconciliation policy is ambiguous and proposed that top management should specify a cut-off point below which it would be deemed ineffective to chase a difference in amounts. On this matter, a husband captain at Operations observed:

“The Checking office must become more flexible, I do not know what authority they have or what instructions they have got from upper management. If they have such instructions they are doing the right thing, because they follow the instructions and procedures of the organisation [...] It is the General Manager's decision, whether he will give authority to the Checking Department to ‘close their eyes’ for 2 €, 3 € difference [...] and this is an issue where they have to perform a risk assessment, i.e. what benefits we will have if Checking ignores 2 € and what benefits there are if they do not, but if the first case is adopted, we will be more reliable in the market”

Procurement-involved agents, however, felt unable to resist the prevailing management structure, which emphasised short-term cost monitoring, a practice introduced and enforced by the founder. Any initiative to discuss the issue would result in a strong argument with top management, which treated close monitoring of suppliers and managers' actions as a crucial resource that contributed cost savings to MarineCo and addressed distrust within and across the

organisation. At this point, however, the human resource manager exhibited critical distance from the views of top management and commented that [...]

“to have established departments one checking after the actions of others means that we institutionalise a climate of distrust”

Despite these observations, however, the status quo regarding the role of Checking was maintained, while resort was made to social controls, and prioritised payment was given to sporadically mediate reactions from critical suppliers. For example, the Accounts manager suggested that previous experience with the supplier and MarineCo’s prestige may temper suppliers’ complaints, something which provided scope for complacency on the adverse consequences from Checking’s time-consuming procedures:

“there are various kinds of people, ones who are honest, reputable and dignified and others who are not [...] some businesses work this way and ask for prepayment without having a reason to do so [...] but there are others who they know us and we know them very well – it is exactly the case of long-term relationships you mentioned above – and even if we always deviate from their granted credit allowance, they will not protest [...] There are also other suppliers who do not provide such scope; they are very strict. The other day a supplier from Brazil informed me that he should be paid by the 2nd of September... if we paid them by the 10th, we wouldn’t get the 10% discount [...] the truth is that some suppliers overdo it with all this...” (Accounts manager)

“to be able to pay them in time it presupposes that the Checking department operates properly; but we cannot do everything I am afraid [...] All right, for the time being we manage to deal with such issues as much as we can...” (Accounts manager)

6.5. Regulatory requirements and industry practices

In addition to power asymmetries, new technologies and controls within MarineCo as well as power asymmetries between MarineCo and its partners, there have also been influences from the wider institutional context. There follows a discussion of how industry practices and regulatory

requirements influenced not only MarineCo's broader perspective of IOCM and control, but also the specific practices it employed.

6.5.1. Regulatory requirements

Since the late 90s MarineCo had been adapting to regulatory requirements, which influenced its IOCM and control practices. A major requirement was the ISM Code that required shipping organisations to develop management systems to ensure safety in operations. In particular, the Quality and Safety (Q&S) department developed MarineCo's management system to comply with not only ISM, but also with ISO, while taking into account 'best practice' publications by Lloyd's Register Fairplay. As regards IOCM and control, the provisions of ISM and their interpretation to specific management procedures by MarineCo reinforced the already established competitive-based perspective in the management of suppliers. These regulatory requirements and prescriptions of 'best practice' were reflected in the design of MarineCo's IOCM and control procedures, which comprised, among others, provisions for contractual agreements on critical types of supply, the request from suppliers of at least three quotations, and the application of a rank-based suppliers' evaluation list. For example, as regards supplier evaluation and approval MarineCo's practices were influenced by Lloyd's Register Fairplay prescriptions:

"All suppliers and subcontractors that have been evaluated and approved are held in a list of authorised suppliers. Procurement orders may only be given to companies on this list. Suppliers who have failed to meet the initial evaluation criteria, or who have subsequently provided inadequate goods or services are put on a list of rejected suppliers. Orders must not be given to these rejected companies except in an emergency situation in which immediate action is required and no other approved supplier is available" (Dieter Mergner, 2005, Lloyd's Register Fairplay, p. 337)

“The Company shall at all times maintain a supplier list. The list shall include all the providers the Company has conducted business with and [...] the evaluation and inclusion of a new supplier on the list shall be based upon: company experience, recommendations, whether ISO certified, environmental performance, size and reputation. The suppliers on the list shall be categorized in five categories, according to their previous performance [...] The suppliers with excellent performance shall be given priority (MarineCo’s departmental procedures manual - Approved supplier list, p. 2)

Nevertheless, the IOCM and control procedure was designed to anticipate both regulatory requirements and ‘best practice’ prescriptions, and the circumstances under which agents could deviate from the procedure:

“When the time does not allow for the bidding process to take place or when multiple suppliers are not available, the supplier shall be nominated outright” (MarineCo’s departmental procedures manual – Victualing and stores, p. 2).

As a procurement handler explained in this respect, the need to meet charterers’ concerns and regulatory requirements for safe and unhindered shipping operations necessitates deviation from the prescribed competitive and rank-based process when there is an emergency situation:

“[U]nfortunately if there is an emergency situation we decide through experience who is the cheapest one; we go directly to them only if it is urgent” (Handler, Procurement).

MarineCo’s IOCM and control procedures of supplier relationships were designed, therefore, to anticipate regulatory requirements and to meet standard industry practice in order to establish an attractive profile to charterers. In this respect, the general manager and chief marine officer observed that MarineCo’s profile should be one of a well managed organisation possessing a strong control system that not only ensures its vessels’ unhindered operations, but also signals to charterers a low-risk organisation complying with the ensuing rules and regulations. For example:

“It is an ISM requirement that the company should initiate controls as regards our suppliers. We have to make sure that the suppliers with whom we do business meet some specific criteria. Further criteria are set by another organisation, which is the ISO and which focuses on issues of quality and not safety and security. In this respect, we have established a

procedure, which promotes service providers that are qualified under ISO 9001 [...] So both the international regulations and the internal policy of the company encourage us to request our suppliers meet requirements for quality, environmental safety and security to meet charterers' concerns. MarineCo cannot impose on its suppliers to conform, but states that priority will be given to those suppliers that make the extra effort to improve and obtain the accreditation" (General manager).

Adaptation to regulatory requirements and reinforcing influences to MarineCo's IOCM and control were also evidenced at the time of the research where Internal Audit was designing control procedures to establish corporate governance to comply with the SOX Act. Internal auditors explained that SOX compliance was of interest to external auditors and shareholders and that it conditioned the development of a bureaucratic control system with clear lines of authority, which they perceived to offer legitimacy and transparency to management decisions, as well as a consistent basis for their conduct:

"I would argue that the daily functions of the company became more bureaucratic in the sense that more controls were posed and we asked people to assume more responsibilities and duties. Moreover, duties and procedures on cost and management that were not so distinctively formed and determined now are more formalised; before it could be that the same procedures were not necessarily followed consistently. Now these procedures have an identity and should be followed with increased consistency, austerity and attention to detail" (Internal auditor).

The auditors suggested, however, that the revised IOCM and control procedure should be compatible with the procedure previously established by Q&S to meet, among others, the ISM Code and ISO requirements. For example, while the approved suppliers' evaluation list was a provision of the ISM-inspired procedures designed by Q&S, during SOX compliance, top management reasserted the list's purpose and the obligation of procurement-involved departments to update it annually. Moreover, the 'comparative matrix' and 'job order' forms, the two cost management forms previously employed to coordinate supplier relationships, were redesigned to comprise hurdles monitoring decision justification and authorisation. These

adaptations reinforced MarineCo's arm'-length perspective to supply cost management, following the organisation's compliance with SOX. Besides, SOX compliance reinforced the importance of Checking's monitoring function and HERMES' standard formats for inter-organisational communication, because they were supportive of Internal Audit's efforts to demonstrate compliance with SOX:

"HERMES is an information system, which enhances our compliance efforts with SOX requirements. This is because HERMES promotes the standardisation of the supply process" (Internal auditor).

"The Checking office operates according to the requirements of SOX as well [...] because the Checking office acts as a central mechanism controlling all expenses, we don't operate as a vessel without a Master here" (Accounts Manager).

Overall, SOX compliance posed requirements for accountability, something that implicated the IOCM of supply IORs in that, for example, informal cost management arrangements to justify supplier selection and order allocation were no longer sufficient. The internal auditors explained that SOX hindered prospects for cooperative relationships and mutual efforts to achieve cost efficiencies because these may involve informal arrangements, which may be perceived by external auditors as foreign to the prescriptions of SOX for transparency. As an IT manager argued in this respect, a documented procedure, which relied on a comparison of quotations was necessary in order to eliminate suspicions of fraud and meet SOX requirements. On the other hand, procurement-involved agents argued that SOX compliance did not vastly change the IOCM and control practices they employed. To them, it has only increased consistency in the procedure aiming to establish monitoring and accountability on their actions through a reporting bureaucracy.

Apart from regulatory requirements, however, organisations constituting industry practice, including ‘best practice’ publications influenced to a large extent MarineCo’s IOCM and control practices with suppliers and customers. There follow some illustrative examples.

6.5.2. Industry practices and MarineCo’s IOCM and control with customers

MarineCo’s IOCM and control of relationships with charterers was influenced by industry practices, regulations and distant organisations, which were reinforced by the lobbying of charterers. For example, the provisions of the ISM Code were employed as part of a routine practice by charterers, such as oil-major organisations and dry cargo shippers, to assess MarineCo’s capacity to perform as a safe carrier. This practice in turn imposed demands on MarineCo to develop management controls that address charterers’ concerns. At the same time, classification societies performed, also as part of a routine practice, audit and accreditation functions to qualify a vessel’s seaworthiness upon reference to ISM and the conventions signed by the flag State(s) at which MarineCo had its vessel(s) registered. Industry practice, therefore, as influenced by customer and regulatory requirements, presented a deterministic context within which MarineCo should exercise IOCM and control to coordinate its chartering relationships.

An example of the influences of charterers on industry practice and on MarineCo’s management controls is seen in respect of oil-majors’ TMSA guideline. Oil-majors are a strategic customer group to MarineCo who established TSMA, through their self-regulating body, the Oil Companies International Marine Forum (OCIMF), in order to obtain further assurances on the capability of their carriers, i.e. shipping organisations, and therefore, MarineCo to comply with the ISM regulation:

“Oil companies are taking due diligence in selecting well-maintained and well-managed vessels for charter. The TMSA programme builds upon the ISM Code and can provide valuable feedback to the charterer on the effectiveness of the ship operator’s ISM system” (OCIMF, 2004, p. 2).

Agents at Technical explained that the organisation had to comply with the TMSA best-practice guide by implementing two management control systems, namely: a Planned Maintenance System (PMS hereafter) and an Inventory Collector. Both management controls, as implemented by MarineCo, received accreditation from classification societies and were designed to enable performance measurement against reliability and maintenance standards according to KPIs (Key Performance Indicators) prescribed by TMSA.

“The programme encourages ship operators to assess their safety-management systems against listed key performance indicators that indicate best practice” (OCIMF, 2004, p. 2).

The overall purpose of implementing these control systems was to strengthen MarineCo’s profile both to oil-majors, during vetting inspections, and to classification societies. Their implementation had positive effects to the organisation’s capability to initiate IORs with oil-majors due to the accreditation the controls received from classification societies. Accreditation not only offered assurance to charterer oil-majors on the potential of these controls to fill gaps in MarineCo’s resource management, but also increased the organisation’s capability to receive acceptances during vetting inspections, and therefore, initiate IORs. Class accreditations are instrumental to a shipping organisation’s capability to initiate charter parties because charterers when undertaking vetting inspections require to view certificates confirming that the vessel(s) nominated for charter are “properly constructed and in good condition” (Stopford, 1997, p. 425) and that the shipping organisation applies appropriate operating procedures.

Meanwhile, the introduction of both control systems as part of oil-majors' expectations had unintended consequences to MarineCo's crew, procurement and technical staff who were now monitored for updating the Inventory Collector when remaining-on-board quantities were falling below critical levels, as well as for planning scheduled repairs. Assignment of responsibility for incidents where a vessel experienced disruptions and off-hire penalties, due to e.g. lack of critical spares in anticipation of damage, was now easier and this meant greater effort on behalf of managers to eliminate such incidents. Moreover, unintended consequences materialised not only within MarineCo, but also outside its boundaries, and specifically to the French classification society, namely Bureau Veritas, which upgraded its audit standards for inspecting PMS effectiveness, following the system's paradigmatic implementation at MarineCo. This unexpected outcome strengthened MarineCo's profile relative to charterers, as it demonstrated the organisation's successful implementation of both control systems over-and-above the audit standards of the French classification society, which is one of the most reputable classification organisations worldwide.

Furthermore, prescriptive influences of industry practice on MarineCo's IOCM and control with charterers indicate the limited scope that MarineCo had to implement modes of cost management and control other than those employed in the industry as part of its own practices. In detail, agents involved with charterers explained that long or short-term charter parties are the main means providing, once agreed, the binding mechanism that conditions and enables the parties' expectations in respect of operational and cost features. They explained that because the drafting of charter parties is standardised in the industry, the parties 'know' beforehand,

depending on the type of charter party, what operational activities, and therefore, what costs they should bear (Stopford, 2009).

For example, any charter party comprises clauses on freight/hire calculation, the conditions under which adjustment of hire or payment of penalties is necessary or when the parties are entitled to terminate the contract:

“A good charter-party will provide clear guidance on precisely who is legally responsible for the costs in each of these events, whereas a poor charter-party may force the shipowner, the charterer or the shipper to spend large sums on lawyers to argue a case for compensation”(Stopford, 2009, p. 185) .

While the Chartering department is responsible to negotiate the terms to be included in each charter party, to an extent their format and overall content is standardised as [...]

“[T]he shipping industry uses standard charter-parties that apply to the main trades, routes and types of chartering arrangement. By using one of these standard contracts, proven in practice both shipper and shipowner know that the contractual terms will cover most of the eventualities that are likely to arise in that particular trade” (Stopford, 2009, p. 187).

Still, though, scope for variability in the terms of a charter party referred to determining the values for operational variables such as speed, bunkers consumption and cargo quantity, which are important for calculating the level of hire/freight to be paid by the charterers. Agreement on the variables to be considered in hire determination and the provisions of a potential profit sharing represented those aspects involved in the cost management and control of a chartering IOR, whose determination hinged on *in-situ* interactions between the parties rather than on standardised provisions.

Agents involved with charterers, however, explained that such arrangements still take place within the limits posed by supply and demand as captured by freight rate assessments provided by professional shipping market analysts [...]

“[T]he way we should operate is specific in general... This means that we cannot do anything different because there are work standards and international standards, for example in the way the freight and some expenses are estimated” (Handler, Control).

Hire calculation, while it was a major revenue management activity that MarineCo undertook with charterers *in-situ*, largely relied on the hire assessment services provided by independent organisations, which conditioned position-practices between MarineCo and the charterers.

For example, chartering managers as part of routine industry practice, resorted to the freight assessment services provided by such market analysts as the Baltic Exchange (www.balticexchange.com), the London Tanker Broker’s Panel (LTBP hereafter; www.ltbp.com) and the Worldscale (WS hereafter; www.worldscale.co.uk), to determine the daily hire or freight. Rate assessments were used as inputs to mutually acceptable formulae agreed *in-situ* that could be as much complicated as to calculate hire, e.g. on the basis of a weighted average of hire payable to a number of agreed trading routes which were used as proxies to the routes of the specific charter party. For example:

“The spot market which will define the monthly rate of hire will be the average WS points as published by the Baltic Exchange Index (BITR) for the routes TC2, TC3, and TC4...” (extract from a time-charter party, p. 26)

“The daily rate of hire shall be calculated and adjusted monthly based upon a weighted average Time-charter Equivalent hire calculation for three notional voyages” (extract from a time-charter party, p. 49)

Overall, these market analyst organisations contributed to MarineCo’s revenue management efforts readily available information of market trends. Chartering managers were seeking in this respect to ‘triangulate’ freight/hire rate assessments from more than one analyst in an effort to grasp market trends as accurately as possible.

At this point, MarineCo’s JVs provide a good example of how the hire assessment services of market analysts deemed open-book accounting ineffective. As mentioned previously,

some of the organisation's relationships with charterers evolved into ventures of jointly owned vessels that were coordinated by reference to a shareholders' contract, which specified that the distribution of JV profits is based on the shares that each partner holds as a proportion of equity. MarineCo's JVs involved time-charters, i.e. long-term contracts, with profit sharing pursued usually with the partner who is both co-owner and charterer of the jointly-owned vessel. The partner, as customer, pays hire for the time-charter to MarineCo, which always holds at least 51% of the equity, while benefits from a potential profit-sharing. Further, MarineCo claims a share on JV profits by reference to its rights on equity from any sub-contracting relationships that the partner, as co-owner, may engage with. The central issue in MarineCo's JVs, however, was how to determine the cost of time-charters and thereafter the profit to be shared. MarineCo's chartering managers initially employed open-book accounting for that purpose:

"There are 2 to 3 ways for one to do so. The first way, which we avoided to employ because we tried it in the past, is the open books one. 'Open books' is a term we use to mean that the charterer is responsible to record the vessel's operation for any sub-contracting effected, and that whatever profit is recorded, to be shared" (Chartering manager, Chartering).

While open-book accounting was employed in the past to monitor JV profits, it was mostly dismissed as chartering managers suggested that the use of open-book accounting for measuring the performance of JV activities, particularly sub-contracting relationships, introduced unnecessary distrust in their communication with the partners. They argued that they could not always confirm how the partner arrived at a certain accounting figure and that therefore, they did not wish to trust the partner to proceed to sub-subcontracting relationships without previously agreeing on the value of the sub-charter with MarineCo:

"We tend to avoid open-books because we wouldn't like the charterer to sub-contract the vessel in a non-profitable contract of affreightment, reducing us the chances, therefore, to perform in a good niche of the market [...] In order to develop a sound relationship with

them we need to rely on data that cannot be questioned; this is for instance, the Baltic Exchange Index, which on a daily basis gives us information of the hire [...] we know in this way what the market gives and, on that basis, we appraise over and under-performance of a sub-charter relationship between our partner and a third party” (Chartering manager, Chartering).

Chartering managers further reported that a common accounting language, which is necessary to the employment of open-book accounting to measure JV performance was hard to establish, and that they preferred to resort to third-party valuation services in order to determine the hire for a JV charter party.

The cost management and control practice of JV vessels was conditioned, however, not only by shipping market analysts, but also by external auditors that, according to the chief operating officer (COO) and the chartering manager, contributed a sense of assurance and fairness to the parties regarding the financial performance of the JV. In particular, the role of jointly appointed external auditors was perceived by managers at MarineCo as helping them to establish a forum for honest communication with JV partners:

“[W]hen Ernst and Young certifies that the joint venture vessel generated a turnover of \$5 million then it cannot be that the figure is \$6 million or \$4 million, it is \$5 million” (Chief operating officer and Bunkers’ manager, Operations and Bunkers).

As the COO commented, they could see no other cost efficient way through which a mutually acceptable accounting language for communicating JV performance could be established:

“We speak a language that derives from the fact that we own 51% of the joint venture. We present the accounts and furthermore when these accounts are audited and signed by some auditors who certify that the numbers are scrutinised and that they present the truth [...] the common language is set by the auditors” (Chief operating officer and Bunkers’ manager, Operations and Bunkers).

Another example of how MarineCo’s IOCM and control of chartering IORs embraced control practices institutionalised in the industry provides the ‘right of first refusal’, which was

sought routinely by chartering managers to ensure charterers' preference of MarineCo in the future. This right refers to a privilege granted in the form of a contractual provision or word of honour to a party in an IOR, e.g. MarineCo, and represents a promise for compensation or reward that aims to redeem an unfulfilled commitment of the granting party, i.e. charterers, to the grantee. In this respect, charterers were granting to MarineCo in exchange of its good services, the 'right of first refusal' or otherwise MarineCo was confident to request that right from charterers the next time they were about to initiate a charter party. The 'right of first refusal' provides the privilege to MarineCo to be the first carrier organisation approached when charterers initiate a charter party and it gives it the opportunity to either accept their offer, including provisions on hire, or decline it. Overall, the 'right of first refusal' was an outcome of a standard practice in the industry aiming to establish reciprocity between arm's-length bound parties.

Finally, MarineCo's set of inter-organisational management controls involved resorting to the self-regulating mechanisms offered by the ship-owners' self-insurance body, i.e. the Protection and Indemnity (P&I) Club, in order to protect the organisation from charterers when the latter could not meet their contractual obligations in terms of hire payment:

"The P&I club is an organisation of self-insurance of ship-owners' vessels for those cases not covered by insurance companies. [It] tries to push, by virtue of its expertise and position, charterers, perhaps by threatening them with some extra measures that could be taken against them. For example, a notification of bad cooperation publicised to the shipping industry [...] We usually start observing some positive results after this. Of course, if their opinion is totally different to ours in respect of the outstanding amount, and if we believe that it is worth the expenses to be incurred [...] then we move on to arbitration by appointing lawyers" (Handler, Control).

There follow examples of how industry practices influenced MarineCo's IOCM and control with suppliers.

6.5.3. Industry practices and MarineCo's IOCM and control with suppliers

As far as the IOCM and control of suppliers is concerned, it has previously been mentioned that Fairplay publications were consulted to design MarineCo's IOCM and control procedures. Fairplay is issued by a reputable classification society, i.e. Lloyd's Register, which the Technical department employed to design ships' repairs and dry-dockings to "improve efficiency and cost control" (Mergner, 2003b, p. iii). Fairplay promotes a competitive-based approach at the shipyard selection phase, a repairs' contract to regulate the implementation of the repairs, and emphasises that power differentials between shipping organisations with shipyards can contribute cost savings. In this respect, the cost estimators for ships' repairs were employing, following Fairplay prescriptions, the following management accounting tools: a detailed specifications list, the shipyard cost comparison table, i.e. a management control used to exercise pressure on shipyards to improve their quotations, the repair budget to closely monitor repair costs, and the 'repair agreement' to set the obligations of the shipyard which should not be breached. Fairplay, therefore, directly influenced MarineCo's IOCM and control practices in ships' repairs:

"I said that since we have purchased these books we have to take advantage of the opportunity and organise something... I started working on something new in 2004 and I produced a detailed specifications list..." (Cost estimator, Technical).

Apart from Lloyd's Fairplay, procurement-involved staff also employed the services of organisations such as the International Ship Suppliers' Association (ISSA, www.shipsupply.org), Platts Bunkerwire, and Lloyd's Register Fuel Oil Bunkering Analysis and Advisory Services (FOBAS hereafter, www.lroil.com). These organisations condition and constitute at the same time industry practice by providing services facilitating cost management and control, which MarineCo employed to eliminate miscommunication and opportunistic behaviour from suppliers. MarineCo managers were employing their services to support their IOCM and control practices.

In detail, ISSA provides self-regulating mechanisms that coordinate relationships between shipping organisations and suppliers through developing “a standard of business conduct which will not only provide for *fair competition*, but will also be a criterion of *good business practice*” (www.shipsupply.org/admin/code.htm, emphases added, accessed 15/10/2009). Under this mission, ISSA provides shipping organisations access to a register of its members to promote selection of ISSA-accredited suppliers and a set of conditions that should be included in any supply contract. Further, it issues a stores catalogue, which provides the basis for communicating requisitions to suppliers through categorising and coding any requested item with a unique number “so that every item ordered is identifiable throughout the supply chain” (www.shipsupply.org/admin/cat.htm, accessed 15/10/2009). The Procurement department was benefiting from ISSA’s self-regulating mechanisms, and were employing the catalogue as a way to introduce standardisation and predictability in the management of its suppliers. For example, MarineCo’s manuals clarified that any forwarding expenses recorded in suppliers’ invoices should be ignored because:

“ship chandlers’ prices are based on the ISSA catalogue where the prices given are for alongside delivery” (Vessel operation procedures manual – Receiving provisions, p. 2).

Moreover, the Procurement manager referred to the relevance of ISSA in MarineCo’s management of suppliers and recommended ways for the development of its catalogue in order to advance predictability and standardisation in procurement:

“[T]he fact that we ask for quotations is not enough to cover for every possible area where opportunism may be exercised [...] I stressed my opinion lots of times before, and among others, in a meeting we had with service providers, i.e. that the items as currently included in the ISSA catalogue should not bear codes but scanning banners and this is because if we want to be sure that what we ask is of the quality we ask [...] every company, which produces a specific product should have the same banner allocated to this product with all other companies worldwide” (Procurement manager).

Another example where MarineCo's IOCM and control was influenced by organisations which constitute industry practice comes from the management of bunkers' suppliers. MarineCo's cost management of bunkers' supplies involved resorting to Platts (www.platts.com), a reputable organisation which, among others, provides daily price assessments and supply information for marine fuel. The price assessments offered by Platts were employed as a benchmark by the Bunkers' department to initiate a competitive bidding practice with three or more bunkers' suppliers. Further, as the bunkers' manager explained, industry practice involves both shipping organisations and bunkers' suppliers sending a sample of the fuel supplied to an independent organisation, e.g. FOBAS in order to secure quality bunkers. FOBAS provides fuel testing services, which the Bunkers' department resorted to in order to obtain confidence that the fuel procured is within international standards and unlikely to cause damage to the vessels' engine. In this way and also by providing to its clients an undisputed bunker quantity survey service (BQS), FOBAS and Platts supported MarineCo's control practices in bunkers and reinforced an arm's-length approach to their cost management. Their services not only helped determine the cost of the transaction, but also contributed controls to prevent or address a dispute and place a claim with regards both to the quality of fuel procured and to the quantity purchased and received.

In summary, organisations distant to the immanent point of interaction, i.e. a specific IOR, conditioned and reproduced standard industry practices, which in turn influenced MarineCo's IOCM and control with suppliers. The standardised services offered by these organisations helped establish system trust (Luhman, 1979) and a sense of ontological security to MarineCo managers with respect to the management of supplier relationships. They were

facilitated in their efforts to initiate, cost manage and control relationships with suppliers at a distance, because they had confidence in the prestige of these organisations and their standard, independent services to eliminate scope for deviations in suppliers' promised offerings and, therefore, conflicts and claims.

The preceding Section highlighted that regulatory requirements, customers' requirements, third-party organisations and industry 'best practice' guidelines, which altogether conditioned institutionalised practices and interactions between stakeholders in the shipping industry, implicated and reinforced MarineCo's predominantly arm's-length approach to IOCM and control. Figure 6.2 provides a comprehensive representation of the network of position-practice relations that were involved in the production and reproduction of MarineCo's IOCM and control practices. The clusters of position-practice relations which were viewed from a relative distance in Figure 6.1, that is prior to presenting how each of the aforementioned themes conditioned and reinforced MarineCo's IOCM and control practices, are now viewed in greater detail (less aggregated), benefiting from the previous presentation. The double-arrowed and unidirectional links depict formal and/ or informal relationships between position-practices.

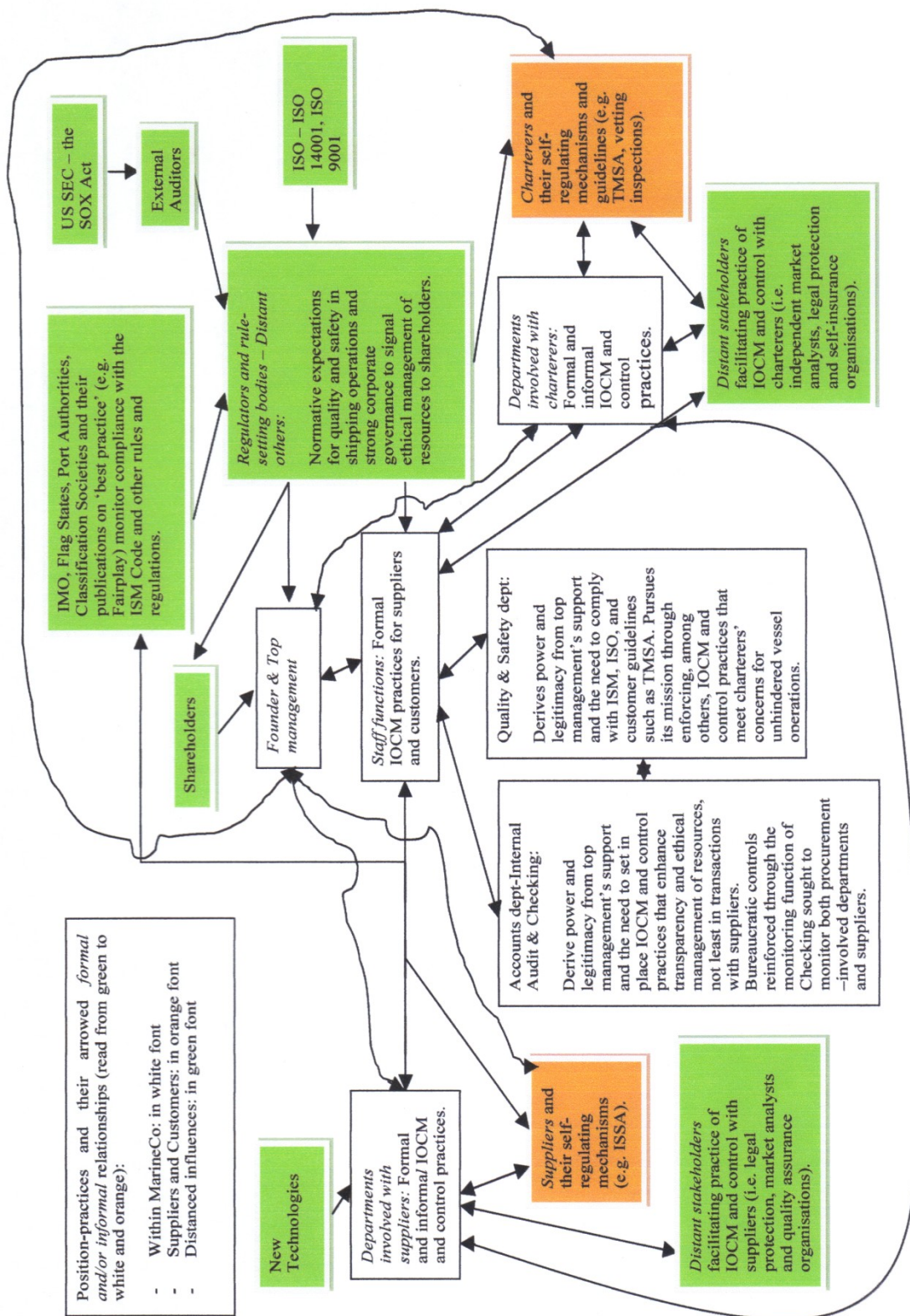


Figure 6.2: A representation of the web of position-practice relations constituting MarineCo's IOCM and control practices

6.6. Recapitulation

This Chapter presented findings from research at MarineCo that emerged from interpreting the research evidence through Stones' (2005) framework. The findings were organised according to the themes that were derived from the analytical path, which was presented in Chapter 5. These themes described influences in MarineCo's IOCM and control practices, which emerged from power asymmetries between MarineCo and its suppliers and customers, as well as power asymmetries within MarineCo. Power asymmetries within the organisation were reinforced by a paternalistic approach to management as well as by incidents of fraud in the IORs with suppliers. Both of these factors in turn resulted in a climate of distrust within MarineCo that spilled over to the inter-organisational domain and influenced the management of the organisation's IORs. Moreover, new technologies and control functions as well as regulatory requirements and industry practices significantly influenced MarineCo's IOCM and control practices.

In detail, the research resulted in unexpected findings that required the researcher to revisit his initial understanding of the organisation's IOCM and control practices. While the researcher was given the impression from the company's web pages, its published accounts, and during a preliminary visit to MarineCo that it engaged in cooperative long-term relationships with suppliers and customers, research evidence suggested that the organisation's IORs were predominantly of an arm's-length nature. This arm's-length perspective underpinned MarineCo's IORs with suppliers and customers, and consequently its IOCM and control practices mostly comprised competitive rather than cooperative cost management and control practices. Exceptions were a few JVs as well as the employment of informal controls and profit sharing agreements to promote a sense of binding and reciprocity between the parties. Still, however,

profit sharing agreements and informal controls did not aim to establish a cooperative perspective with MarineCo's counterpart organisations in the sense of pursuing mutually beneficial cost efficiencies through the active participation of the parties. Rather, the aim of these controls was to assist MarineCo to mediate its exposure to market volatility and to manage its dependence on suppliers and customers in the event of underperformance or breach of contractual commitments.

Research at MarineCo highlighted that its IOCM and control practices were influenced by an array of structures that impinged on and emerged through a network of position-practices located within and outside the organisation. Power asymmetries between MarineCo and its charterers, where the organisation assumed a dependent position, influenced the organisation's IOCM and control practice with respect not only to charterers, but also to suppliers. On the other hand, MarineCo largely assumed a dominant position relative to its suppliers through adopting a quasi-arm's-length approach that combined competitive-bidding and contracts to achieve cost efficiencies, with a rank-based order allocation to ensure multiple sources of supply. The adoption of multiple suppliers was necessitated by the need to meet charterers' concerns for uninterrupted carrier services.

Moreover, power asymmetries within MarineCo and incidents of fraud between the organisation's managers and suppliers had resulted in a climate of distrust within the organisation, which was coupled with a paternalistic and cost stringent approach imposed by the founder. Distrust towards MarineCo managers in respect of their practices with suppliers resulted in an emphasis on arm's-length dealings, which was further reinforced by the introduction of new technologies and control functions as well as by the influences of regulations and the services of distant others.

In particular, regulations and industry practices constituted an array of distant institutions influencing MarineCo's IOCM and control practices with both suppliers and customers. Similarly, the IOCM and control of MarineCo's equity-based JVs relied on valuation and assurance services provided by independent organisations such as market analysts and external auditors. The requirement for trust in JVs was (re)placed by the services of these organisations, which were seen as objective and fair to both parties, while open-book accounting was dismissed because it involved relying on the accounting of the partner.

Agents' conjunctural understandings of the context of action as constituted by the web of position-practices presented in Figure 6.1, supplemented the researcher's personal observations and document reviews in deriving the aforementioned themes in respect of MarineCo's IOCM and control. The following Chapter engages not only with how findings address the research questions and contribute to the existing literature, but also with a critique of Stones' (2005) contribution to the research with the aim of proposing avenues for theory development.

CHAPTER 7

DISCUSSION

7.1. Introduction

This Chapter proceeds with a discussion of findings at MarineCo. Discussion involves employing Stones' (2005) framework to address the research questions and demonstrate how the findings differentiate or support existing literature in IOCM and control. At the same time, discussion of Stones' contribution in addressing the research questions sets the grounds for a critical evaluation of his framework with the aims of proposing theoretical concepts that can contribute to its refinement and improvement.

Stones' version of ST and his use of position-practice relationships highlighted that MarineCo's IOCM and control practices were outcomes of interaction processes among multiple agents or groups of agents that were positioned both within and outside MarineCo's legal boundaries. These agents or their aggregates posed distinct but at times overlapping media and constraints to the organisation's IOCM and control practices, which in turn reproduced or changed these media and constraints. This insight offered by Stones supports the calls of those management accounting researchers (e.g. Caglio & Ditillo, 2008; Håkansson & Lind, 2007; Kraus & Lind, 2007) who argued that research in IOCM and control should be placed against a network rather than a dyadic perspective in order to capture the influences of others who may be absent and distant from the specific relationship, but who may pose irresistible forces or independent causal influences, in Stones' terms, to it.

The process of answering the research questions, however, motivated a critical evaluation of Stones' framework. This Chapter suggests that while Stones approaches the structuration of economic phenomena, as IOCM and control practices are, at a more substantive level, he overemphasises certain ontological and epistemological concepts, i.e. agents' hermeneutics and

their phenomenology of structures, at the expense of others, i.e. agents' action. It will be proposed that Stones' framework needs to place more explicit attention on how structures of domination implicate, along with legitimation and signification, notions of efficiency and effectiveness in agents' actions. Moreover, it will be suggested that ontological concepts, which influence agents' praxis, i.e. structural contradictions, path-dependency, dialectics of control and co-evolutionary processes, can equip the framework with significant potential.

The Chapter is structured as follows: Section 7.2 addresses the research questions with the aims of highlighting how the case findings, interpreted from Stones' perspective, contribute to our understanding of IOCM and control in light of the existing literature. Then, Section 7.3 proceeds to discuss how Stones' framework can be refined to improve its potential for future research in IOCM and control, while Section 7.4 considers the limitations and constraints that impinged on the research. Finally, Section 7.5 presents some concluding remarks before proceeding to the conclusions Chapter.

7.2. Employing Stones (2005) to address the research questions

As it was mentioned in the previous Chapter, the IOCM and control of MarineCo's supplier and customer relationships underwent a number of changes since the early 90's.

It was shown that a number of departments and individuals were involved with introducing and embracing these changes and that power asymmetries and distrust within and outside MarineCo significantly conditioned this process. Moreover, apart from suppliers and customers, distant others such as regulatory bodies, market analysts as well as suppliers' and customers' self-regulating institutions, conditioned MarineCo's IOCM and control practices. A

web of position-practice relations both within and outside MarineCo (see Figure 6.2) were involved in producing and reproducing a set of formal and informal cost management and control practices that underpinned a predominantly arm's-length perspective. The following discussion employs the lenses of Stones' theory to highlight the nature of MarineCo's IOCM and control practices, why MarineCo embraced these practices as well as their intended and unintended effects.

7.2.1. Relationships with customers

As it was shown in Chapter 6, MarineCo's IOCM and control practices to coordinate customer, i.e. charterer relationships were conditioned, produced and reproduced amidst a web of position-practice relations that extended beyond the organisation's boundaries. This network of relationships revealed the enabling role of forces exogenous and distant to the immanent point of interaction, i.e. a specific IOR between MarineCo and its customers, to influence the organisation's IOCM and control practices.

Research at MarineCo revealed that IORs with customers were largely conditioned by industry practices, which in turn were outcomes of recursive interrelationships among regulations, customers and their self-regulating institutions as well as industry analysts. Moreover, in Chapter 6, it was shown that MarineCo's dependence on charterers was evident in the understandings of agents positioned at all levels of the organisational hierarchy, including agents involved with suppliers. Their knowledge of the situation underscored the importance of complying with charterers' normative expectations, which underlined safe and undisrupted carrier services. In this respect, while some cooperative formal and informal cost management

and control practices were employed to manage MarineCo's dependence and ensure an attractive profile to charterers, the overall IOCM and control practice with charterers was largely underpinned by an arm's-length perspective that was overly institutionalised and embedded in the wider industry context.

Agents involved with charterers' knowledge was more or less immersed in a context, where wider 'conventional' structures, in Stones terms, constituting industry practice influenced their understandings of the opportunities and constraints within which they could pursue their positional duties. In this respect, the interplay between structure and agency was influenced not as much by 'situational tendencies', but by independent to MarineCo, i.e. external, forces constituting industry practice and constraining the organisation's IOCM and control with charterers (Stones, 2005). Institutionalised industry practices, therefore, formed external structures to MarineCo, which emerged from repetitive, recursive interrelationships over a long period of time among shipping organisations, charterers and other stakeholders in the industry such as regulators and market analysts.

Agency, therefore, in chartering IORs was largely confined within the limits posed by independent and distant others. In such circumstances, Stones (2005) observed that the potential of agents to drastically change their conduct and the external structures is limited because [...]

“[m]any of the things an agent does will be experienced, more or less tacitly, as things that are required of them by their embeddedness in a particular range of position-practices” (p. 113).

For example, charter parties that stipulate the terms of a chartering agreement, and therefore, set the main structural features conditioning and enabling the coordination of the relationship, are largely standardised as a result of institutionalised industry practices. In turn, institutionalised

industry practices in contract drafting are the outcome of recursive interrelationships over a long period of time between shipping organisations and charterers that embedded standard modes for communicating expectations, commitments and meanings in charter parties. In this respect, chartering-involved agents' conjunctural understandings emphasised limited opportunities to negotiate contract terms that fundamentally deviate from the terms of standard charter parties.

Agents involved with charterers resorted to their discursive levels of consciousness to explain that their scope for action is embedded within this largely deterministic context. To them, the shipping industry is highly regulated and embeds power asymmetries in favour of charterers. Charterers in turn, exert pressure on shipping organisations to comply with their requirements that agents at MarineCo perceive as conveying a sense of imperative in the ordering of their priorities. This is because charterers' requirements obtain legitimacy from the fact that they promote 'best practice' in line with regulatory requirements.

To comply with charterers' requirements chartering-involved agents' had to comply with normative expectations and interpretive schemes that reflected an imperative to meet the terms of the charter party and respond over-and-above to changes in regulations and charterers' guidelines. The aim was to ensure safe and undisrupted carrier services. Agents at MarineCo responded to these structural conditions, which comprised both irresistible causal forces, e.g. need to meet charterers' guidelines, and independent causal influences, e.g. need to comply with regulatory requirements, through employing a set of cost management and control mechanisms that was informed mostly by institutionalised practices in the industry, as argued above, and to a lesser extent, by MarineCo's initiative.

As regards the employment of management controls emerging from institutionalised practices and recursive interrelationships in the industry, it was shown in Chapter 6 that the establishment of PMS and Inventory Collector was an outcome of responding to oil-majors' guidelines and, therefore, it involved the reproduction of charterers' dominance. Both management controls were deployed as information systems, which apart from enabling MarineCo to exercise control over its inventories at a distance and monitor the fleet's needs for maintenance, reproduced charterers' normative expectations for a sound control system that ensured uninterrupted and safe services. At the same time, PMS and Inventory Collector strengthened MarineCo's position relative to classification societies and their requirements. PMS implementation met over-and-above the standards of classification societies and this had not only the intended effects of receiving accreditation from the societies and, therefore, enhancing MarineCo's profile to charterers, but also unintended effects. Unintended effects referred to consequences not only within MarineCo that involved improved capacity in assigning responsibility to members of staff for engine disruptions and off-hire penalties, but also to a classification society, which upgraded its audit standards for inspecting PMS, following the system's paradigmatic implementation at MarineCo.

Moreover, industry practices influencing the IOCM and control of chartering IORs referred to not only the standard provisions of charter parties, but also the conditions regulating hire determination. These involved independent market indexes and market analysts, which were diffusing interpretive schemes, e.g. on the importance of such variables as trading routes and tonnage, and providing resources, e.g. customised hire assessments, that contributed to hire determination, and therefore, facilitated and conditioned MarineCo's revenue management. At

the same time, the ‘right of first refusal’ and the safeguards offered by P&I Clubs were also outcomes of recursive interrelationships over a long period of time among shipping organisations, insurers and charterers and represented institutionalised modes of management control that facilitated the coordination of IORs with charterers.

The aforementioned institutionalised practices that enabled, constrained and constituted at the same time MarineCo’s IOCM and control were perceived at the organisation as producing and reproducing a sense of objectivity and trust between the parties that emerged by virtue of the independent, wider structures that conditioned their development. Against this context, open-book accounting was dismissed because it suffered from uncertainty and lack of trust in the accounting practices of the JV partner as compared to the services of market analysts and external auditors, which were ‘generally accepted’ to offer undisputed means to value the cost of a chartering agreement and provide assurance on the JV’s financial performance.

Within this largely deterministic context, however, MarineCo has been one of a few early adopters of profit sharing agreements. Profit sharing agreements were perceived as a means that strengthened MarineCo’s profile relative to charterers, which agents involved in relationships with them employed, along with informal controls, in order to by-pass, even temporarily, charterers’ sanctions and coercive behaviour. Further, agents’ conjuncturally-specific understandings highlighted that profit sharing agreements protected the organisation from wider ‘conventional’ structures, i.e. freight market volatility as reflected in market analysts’ reports. Similarly, informal controls were fashioned in agents’ conjunctural understandings as capable of mediating adverse consequences from the organisation’s underperformance either due to late payment of suppliers or due to a breach in the terms of the charter party. However, agents’

understanding of the effectiveness of these controls highlighted that they only limited charterers' coercion and sanctions up to the point where the latter were not financially affected.

In summary, MarineCo's set of IOCM and control practices with charterers comprised mostly competitive and some cooperative formal and informal controls of a cost and non-cost based nature. These controls aimed to manage MarineCo's dependence on charterers within a highly deterministic industry. The majority of IOCM and control practices MarineCo enacted with charterers were recursively shaped by distanced others who conferred a sense of objectivity and trust on these practices, and which agents at MarineCo perceived as providing the only available means for managing chartering relationships.

7.2.2. Relationships with suppliers

It was shown in Chapter 6 that a landmark, which initiated change in MarineCo's supply IOCM and control structures, was confirmed incidents of fraud. These incidents severely challenged top management's knowledgeability on the efficacy of the prevailing cost management and control structures to both inform and monitor supply managers' efficient and effective conduct. Equally importantly, events that confirmed suppliers' opportunistic behaviour motivated a reformulation of the organisation's policies and guidelines in supply cost management and control.

Both incidents were perceived by top management as unintended consequences, which resulted from procurement agents' and suppliers' instantiating what internal auditors described as loosely adopted cost management and control practices. Top management's conjuncturally-specific understandings, which highlighted interpretive schemes, normative expectations and power attributes that reflected the founder's paternalistic approach, were challenged in this

respect. This is because while the founder's perspective emphasised cost stringency, distrust and increased monitoring to both third parties and subordinate managers, the prevailing IOCM and control structures were proved inadequate to meet his embraced values and norms.

A change process, therefore, of the prevailing IOCM and control structures, which were acknowledged by both procurement and accounts-involved agents as loosely specified, roughly abided by and inadequately monitored, was initiated. Requesting suppliers for quotations and competitive benchmarking were asked to be practised consistently by the accountants. However, the change of the cost management and control process only aimed at ensuring that the founder's dominating values and norms were evident in procurement agents' practice of IOCM and control. Change did not seek, therefore, to alter the distrusting and adversarial structures that underpinned MarineCo's management both within and outside the organisation. Instead, the change process essentially involved the establishment of bureaucratic procedures that not only formalised and reduced the level of abstraction of the existing IOCM and control structures, but also posed normative expectations for the demonstration of ethical conduct by supply management.

A new cycle of structuration involved, therefore, the formulation of IOCM and control policies that increased monitoring of both suppliers and procurement-involved departments through establishing a bureaucratic control system with clear lines of authority and reporting mechanisms. These policies conditioned procurement agents' hermeneutic-phenomenological capacities. Their dispositions conveyed strong beliefs on the potential of close, collaborative IORs to allow scope for fraudulent action, while their conjunctural understandings emphasised competitive-based order allocations to not only minimise MarineCo's dependence and eliminate suppliers' opportunistic behaviour, but also demonstrate ethical conduct and address distrust.

Besides, signification and legitimation structures communicating and sanctioning respectively the ethical, competitive-based and highly monitored conduct of the supply IOCM and control practice, were reinforced by the introduction of HERMES and the establishment of the Checking office.

HERMES facilitated MarineCo's dominance over suppliers via providing a means for monitoring their offerings. At the same time, HERMES enabled procurement staff to meet top management's and Account's normative expectations for unambiguous order allocations. HERMES was employed as an integrated information system that apart from embedding a standardised conduct of formal cost management controls, i.e. the 'comparative matrix' evaluation and the 'job order' forms, it also reinforced close monitoring of procurement agents' conduct through linking the budget with the aforementioned IOCM forms. IOCM and control structures signifying distrust to suppliers and legitimating a competitive perspective to their cost management were further reinforced following the introduction of HERMES, which contributed to both the maintenance of power asymmetries within MarineCo and the dominance of the organisation over its suppliers.

Power asymmetries within MarineCo and distrust in the management of suppliers were also reinforced from the introduction of the Checking office. The Checking office acted as a centre that monitored the effective performance of the revised IOCM and control procedure, while it also sought to eliminate supplier's opportunistic behaviour. Its operation, however, had unintended consequences to both MarineCo's procurement managers and suppliers. While procurement staff's conjunctural understandings acknowledged the positive effects of Checking

in monitoring costs and preventing suppliers' opportunistic behaviour, they also highlighted the adverse effects of the Checking process on the fulfilment of their positional obligations.

The Checking function was an external structure to procurement-involved agents, which conditioned their practice of IOCM and control in respect of not only monitoring their abidance to the prescribed procedure, but also establishing goodwill with important suppliers who should be paid within their credit times. However, the founder's instructions to Checking for a cost stringent approach in the clearance of invoices acted as an external structure to both Checking and procurement departments, and had unintended consequences. While procurement-involved staff verbally acknowledged the adverse consequences that the time-consuming checking process had on their capacity to pursue cost beneficial supply relationships, they did not resist the founder's perspective, which was granted by top management the highest level of imperative and legitimacy.

Further, while some agents called for a restructuring of the Checking function, exhibiting critical distance and adequate knowledge of the situation, they argued that only top management could raise the issue with the founder. Meanwhile, however, an increasing number of suppliers were sending reminder statements of pending payments and were threatening to take legal action unless payment was effected. The prevailing management structures, therefore, conditioning supply IOCM and control on the basis of adversarial and competitive-based values and meanings were reproduced, not least because the Checking office contributed monitoring practices that instantiated these structures. Nevertheless, the unintended consequences from Checking's practice were mediated somehow given the reflexivity, i.e. critical distance, exhibited by the accounts manager who prioritised payment of critical and, therefore, dominant suppliers.

The conjuncturally-specific understandings of procurement-involved agents, therefore, exhibited normative understandings and meanings that emphasised top management's distrust to their management of supply IORs as well as the imperative of eliminating dependence on a few suppliers and exhibiting ethical conduct. The introduction of HERMES and Checking reinforced these understandings, while procurement agents' practice of IOCM and control, as constrained and facilitated at the same time by these two management controls, reproduced the aforementioned structures. However, the reproduction and enactment of supply IOCM and control structures was also influenced by position-practice relations that were located externally to MarineCo's boundaries. In this respect, it was examined how wider 'conventional' structures interrelate with 'situational tendencies' within MarineCo to "give a certain general direction and dynamic to the kind of interplay that one might expect between structure and agency" (Stones, 2005, p. 111), and therefore, to highlight the outcomes from such duality.

As it was suggested in Chapter 6, MarineCo's IOCM and control of supply IORs was influenced by the ISM Code and the SOX Act that regulated industry practice to ensure quality shipping and the establishment of corporate governance in publicly listed organisations respectively. Compliance with both regulations was compulsory for MarineCo and, therefore, both posed, in Stones' terms, independent causal influences to the organisation. In detail, compliance with ISM's primary requirement for uninterrupted and environmentally safe vessel operations could be ensured, among others, through a competitive-based approach to the selection of suppliers. Agents at Q&S arrived to these conclusions by drawing from their repertoires of the structures conditioning MarineCo's supply IOCM and control. Their conjuncturally-specific understandings highlighted top management's dominance on

procurement-involved agents' practices and its attachment to a competitive-based approach. As a result, they interpreted compliance to ISM requirements by further embedding the prevailing IOCM and control structures. The outcome, therefore, of this cycle of structuration was the drafting of MarineCo's ISM-inspired manuals in a way that promoted a competitive-based approach combined with a rank-based order allocation among high performing suppliers.

At the same time, the SOX Act reinforced the MarineCo-wide general disposition on the avoidance of collaborative IORs with suppliers, because these could be coordinated on the basis of informal arrangements. While informal controls, e.g. freezing suppliers' orders in case of underperformance, were accepted as legitimate means to cost management and control, they were not accepted to justify an order allocation. In other words, there should be objective evidence to justify supplier selection and the cost of their offering and this, according to the auditors, could only be ensured through formal, accounting-based controls. In this way, the importance of formal controls to provide evidence of ethical conduct was emphasised through the auspices of the internal auditors, who diffused interpretive schemes and normative expectations to inform procurement agents' action-informing interpretations with respect to SOX requirements. The auditors elevated competitive-bidding as the major principle guaranteeing the ethical cost management of suppliers, while the Checking office supported Internal Audit's efforts by ensuring that procurement managers allocate orders in a way that eliminates suspicions of preferential treatment of suppliers.

While the independent influences of SOX and ISM were more or less evident in agents' understandings of the situation, observations of their action and evidence derived from agents' discursive level of consciousness highlighted their reflexivity and capacity to 'act otherwise' and

change the prescribed cost management practice. For example, the need for MarineCo to comply with regulatory and charterers' requirements for safety and quality in shipping posed normative expectations to procurement staff to ensure that the fleet would not run out of critical spares in case of emergency. This commitment, however, as procurement agents explained, meant that there was not always sufficient time to conduct competitive and rank-based order allocations, particularly in cases of emergency. As a result, procurement agents' deviant conduct from the prescribed procedure motivated change in the organisation's IOCM structures through the incorporation of a provision in MarineCo's ISM-inspired manuals which legitimised deviations from the embedded procurement practice. Another example of agents' potential to 'do otherwise' is where top management criticised procurement managers for constantly selecting certain suppliers to allocate orders. In this respect, procurement managers resorted to their repertoires, which reflected the founder's inclination to favouring management decisions that underpin a cost stringent perspective, to defend the legitimacy of their actions and mediate top management's criticisms.

Apart, however, from formal and informal accounting and non-accounting based controls that were developed and adapted within MarineCo, there have also been distant others, i.e. market analysts and suppliers' self-regulating organisations that facilitated reproduction of MarineCo's arm's-length perspective of IOCM and control. For example, market analysts were offering readily available price and quality assessment reports facilitating competitive benchmarking in the selection of suppliers and the resolution of disputes among arm's-length related parties. At the same time, ship suppliers' self-regulating organisations were promoting arm's-length relationships through offering standardised services that eliminated uncertainty on

the quality of suppliers' offerings, while also informed cost management and control through providing detailed terms and conditions applicable to any supply contract.

In summary, MarineCo's set of supply IOCM and control practices were constituted by bureaucratic, competitive formal controls of a cost and non-cost based nature that were supplemented with informal controls mainly in order to push suppliers' to improve their offerings or to protect MarineCo's power position. This set of controls conferred legitimacy, power and purpose in procurement-involved agents' mindsets. Their conjunctural understandings suggested that their IOCM and control practices were recursively shaped by: structures of domination that underpinned power asymmetries and distrust within and outside MarineCo; structures of legitimation that emphasised the need to employ IOCM and control practices compatible with regulatory requirements and industry practices; and structures of signification diffused from the organisational and institutional environment, which elevated competitive-based cost management supplemented with informal controls as the 'only' meaningful option capable of demonstrating ethical conduct and curbing suppliers' opportunism.

7.2.3. Contributions to the literature of IOCM and control

The previous parts addressed the research questions through the lenses of Stones' (2005) framework. This part in turn, engages with a discussion of how findings at MarineCo, as viewed through Stones' version of ST, contribute to the existing literature of IOCM and control.

In particular, findings at MarineCo highlighted predominantly arm's-length IOCM and control practices supplemented with some cooperative controls. It is argued, therefore, that IOCM and control as a concept need not exclusively involve "cooperative efforts by members of

separate organisational units to modify cost structures and create value for its participants” as Coad and Cullen (2006, p. 343) posit, but competitive modes as well. It was shown that MarineCo’s IOCM and control practices were influenced by such issues as power asymmetries within the organisation and in its relationships with suppliers and customers, distrust by top management of procurement managers and their relationships with suppliers, new technologies, industry practices and regulations. The case, therefore, contributes to the existing literature of IOCM and control issues of power and trust, network effects from industry practices and stakeholders as well as new technologies with the aims of highlighting their enabling role to influence either a cooperative or a competitive perspective for IOCM and control.

In particular, this research demonstrated how the existence or lack of trust in the management of an organisation influences its perspective of IOCM and control. It was shown that trust at MarineCo was inflicted because the trustworthiness of some agents and their ethical management of IORs had been questioned. Within this distrusting context, resort to arm’s-length modes of IOCM and control provided greater confidence, as compared to cooperative modes, on the unbiased conduct of IORs. This is because cooperative IORs were perceived to allow for informal cost and control arrangements that could give rise to suspicions as far as their ethical and efficient conduct was concerned. Moreover, the role of powerful individuals such as the founder and top management was instrumental in enforcing and reinforcing, particularly following the revelations of fraud, an adversarial perspective to the cost management and control of supply IORs. On the basis of the above, this research supports the argument put forward by Free (2008) who argued that cooperative modes of IOCM and control may be “unrealistic in

organizations that have their history and power relations steeped in hierarchical, autocratic and adversarial buyer-supplier relations” (p. 649).

Further, the role of powerful individuals *within* MarineCo showed that they did not contribute as much a truce, as Coad and Cullen (2006) suggested, but an enforced order to the practice of IOCM and control, which though at times was by-passed by procurement managers. The existence of a fragile truce, rather than trust, however, was implied in the relationships of asymmetric dependence between MarineCo and its suppliers and customers. On the one hand, MarineCo established expectations among a number of high performing suppliers that it would allocate them a satisfactory amount of orders upon a rank-based, competitive schedule (see also Cooper & Yoshikawa, 1994; Gietzmann, 1996; Johnsen & Ford, 2005), and on the other it was seeking to meet charterers’ expectations in order to maintain prospects for future relationships with them. Any failure to maintain a truce in the relationship, due to e.g. inferior performance or irreconcilable expectations, could cause the reactivity of the parties in the form of e.g. penalties and, at extreme circumstances, to the termination of the relationship.

Power asymmetries, therefore, played a significant role in ascertaining modes of IOCM and control at MarineCo. The organisation pursued competitive-based cost management and control modes in its relationships with suppliers where it largely maintained its dominance, while it mixed an arm’s-length approach with cost management and informal controls of a cooperative nature in its relationships with charterers. Informal controls were important “in the wider context of relationship building” (Agndal & Nilsson, 2009, p. 100), such as in order to build reciprocity and further embed the relationship. At this point, however, MarineCo’s choice of IOCM and control also supports the views of Cox (1999, 2001, 2004) who argued that cooperative modes of

cost management and control are appropriate for the more dependent parties in IORs and where there is high interdependence between the parties. Similarly, the case at MarineCo supports the views of Donada and Nogatchewsky (2006) and Cäker (2008) who argued that bureaucratic, formal controls are employed along with informal controls by dominating organisations, whereas informal controls are important to organisations that seek to mediate their dependence and mask their underperformance in order to preserve the relationship with the dominant party. Moreover, in agreement with Cäker (2008), the findings showed that informal controls could only temporarily by-pass the adverse effects of bureaucratic controls, if at all, because dominating charterers were employing standard IOCM and control practices in order to eliminate risk.

At the same time, the research also demonstrated the role of new technologies to support management controls and address distrust through increased monitoring of suppliers at a distance. Research at MarineCo supported in this respect the views of Frances and Garnsey (1996), as opposed to the views of Cuganesan and Lee (2006), on the facilitating role of new technologies in management control to not only promote integration and monitoring of inter-organisational activities, but also grant the owner of these technologies a hegemonic position in the relationship. Further, the distrusting approach through which HERMES and the Inventory Collector were applied, supports Kulp's (2002) suggestions in that the implementation of an integrated information system, which grants decision rights to suppliers to automatically initiate a supply, hinges on the willingness, i.e. trust, of the customer to delegate the supplier such authority.

At the same time, this research supports and extends the argument placed by Seal et al. (2004) on the importance of institutionalised practices produced and reproduced in the wider inter-organisational context to establish system trust and make the option of arm's-length type

relationships attractive. In this respect, while research at MarineCo highlighted the failure of open-book accounting because of lack of trust in the accounting of the partner (see also Carr & Ng, 1995; Kajüter & Kulmala, 2005; Kulmala *et al.*, 2002; Seal *et al.*, 1999) or because of fear that the disclosed cost data would be misused by MarineCo (see also Carr & Ng, 1995; Free, 2008; Gietzmann, 1996; Seal *et al.*, 1999), it emphasised the role of distant, networked others to influence choice of IOCM and control practices.

For example, research at MarineCo showed that the IOCM and control of IORs with charterers was conditioned by institutionalised interrelationships among networked stakeholders in the shipping industry. These stakeholders, including charterers and their self-regulating mechanisms as well as regulators and market analysts conferred a sense of objectivity, predictability and, overall, trust (see also Mouritsen & Thrane, 2006; Seal & Vincent-Jones, 1997) in the enactment of arm's-length type controls, which were properties largely appreciated by agents at MarineCo. This is because they could see no other 'generally acceptable' or legitimate alternative to enact IOCM (see also Sydow & Windeler, 1997, 1998). Further, support is offered to the argument of Seal *et al.* (2004) in that new technologies such as the internet or integrated information systems promote the disembedding of IORs through establishing "[g]reater trust in the profitability of arms-length relations" (Seal *et al.*, 2004, p. 90).

Furthermore, this research addresses the argument of Kraus and Lind (2007) on the potential interdependences between an organisation's internal control system and its IOCM and control practices. For example, it was shown that the introduction of Checking that monitored procurement managers' conduct of the prescribed procurement procedure, and HERMES that provided a control interface between the budget and supply cost management, were primarily

influenced by the distrust of top management and the revelations of fraud, which were major issues in the organisation's internal agenda. Moreover, these controls and the need for ethical and efficient conduct in the management of IORs that underpinned their development were reinforced by the SOX-compliant project, which was high in MarineCo's internal agenda at the time of the research. In relation to the above, the research also provides support to the argument of Thrane and Hald (2006) who argued that control systems and the context within which they are produced "mutually condition each other in a dynamic, emerging process shaped and developed by interdependencies, the structuring of field, accounting devices and local learning processes" (p. 312).

This research, therefore, contributes to the literature that the internal control systems as underpinned by the overall agendas of organisations, e.g. for MarineCo anti-fraud policies and SOX compliance, can influence their approach to IOCM and control. Finally, the research supports Mouritsen et al. (2001) who argued for the potential of modes of IOCM to influence the structure of the organisation that set these modes in place. For example, the intra- and inter-organisational functions of Checking showed that interdependences between MarineCo's internal control systems on the one hand and its IOCM and control practices on the other, had unintended consequences, which could potentially stimulate changes in the internal controls or agendas that set these practices in place.

The following Section engages with a critical evaluation of Stones' (2005) in terms of its potential to guide research in IOCM and control. While a reflective account of the framework's contribution to the research is provided, the aim is to highlight its weaknesses and propose avenues for its further development.

7.3. A critical evaluation of Stones' (2005) and propositions for theory refinement

A reflection of Stones' (2005) contributions in interpreting the findings at MarineCo and in addressing the research questions highlighted the framework's potential to provide a process perspective, which illuminated why and how MarineCo's IOCM and control practices were established and what their effects have been.

In particular, Stones' quadripartite framework highlighted, through its employment of agents' internal structures and the concept of position-practice relations, the enabling role that forces exogenous and distant to the immanent point of interaction, i.e. a specific IOR, may have on the choice of IOCM and control practices. In this respect, it was shown in Section 7.2 that agents' conjuncturally-specific understandings and their general dispositions articulated perception of the facilities and constraints within which they conducted IOCM and control practices. Further, it was shown in Section 7.2 that Stones' framework highlighted how agents' reflexive monitoring of the structural context accounted for not only acknowledged but also unacknowledged conditions of action and, therefore, unintended consequences. As regards active agency, agents' potential to 'act otherwise' was approached through recognising their ability to both resist the structural context and comply with its demands. Agents were equally shown to possess power to resist the structural context and to improvise contrary to what their phenomenological schemas dictated as well as to choose to comply with the exigencies of the structural context in order to fulfil their positional commitments. The option of agents' choosing to comply with the external structures was attributed to phenomenologically and hermeneutically-informed interpretations that highlight lack of adequate power and knowledge to resist. Overall,

these concepts of Stones' framework provided useful sensitising media to undertake the research at MarineCo.

On the downside of Stones' framework, it is argued here that it does not provide enough in terms of *specific concepts* to illuminate the realm of action and its duality with structure. For example, while Stones places overt emphasis on the phenomenology and hermeneutics of structuration delineating the content of internal structures and their interrelationships, he tends to downplay certain aspects of Giddens' ST, which need to be re-emphasised if ST is to contribute to our understanding of IOCM and control. Moreover, concepts developed in previous studies of structuration and institutional analysis (e.g. Dillard *et al.*, 2004; DiMaggio & Powell, 1983; Sydow & Windeler, 1997, 1998) will also be brought forward to argue that their explicit consideration under the active agency element of the quadripartite framework can facilitate our understanding of IOCM and control.

In detail, while Stones (2005) refers to the importance of both allocative and authoritative resources to the structuration of social relations, he does not go as far as to provide specific concepts that emphasise issues involved in their deployment, which is central to research of economic phenomena as IOCM and control is. Stones (2005), however, sketches the structuration problematic for economic phenomena in modern societies by arguing that:

“In societies with complex divisions of labour, power over the constitution of one's own capabilities (resources) will typically be highly circumscribed. Much will depend upon others within the external structures, their resources, practices and the virtual schemas they draw from in allocating and authorising” (p. 73, parenthesis in original);
and that:

“with the emergence of the large diversified and managerially controlled firm, its complexities have fragmented the simple hermeneutic schema ‘of the profit maximising rule into a plethora of competing managerial “logics of action”’ (Whittington, 1997/1992,

p. 378) that are irreducible to a simple contradiction between capital and labour” (Stones, 2005, p. 105)

While Stones (2005) acknowledges the importance of power and more specifically of *relational power* over material and human resources, he places overt emphasis on their virtual, i.e. phenomenological, dimension downplaying their deployment “as the medium of the exercise of power at the point of interaction” (ibid, p. 72). Overt emphasis on the hermeneutic and phenomenological aspects of structuration can be observed in the section where Stones (2005) elaborates on Sewell Jr.’s and Giddens’ views of structures as rules and resources (pp. 67-74), and in his definition of active agency as “the ways in which the agent either routinely and pre-reflectively, or strategically and critically, draws upon her internal structures” (p. 85).

Despite overt emphasis on phenomenological aspects, it would be unfair to Stones to suggest that he ignores active agency. Instead, he refers to five of its aspects, which he claims to be consistent with Giddens’ (1984) stratification model of the agent, i.e. shifting horizons of action, creativity, improvisation and innovation, degrees of critical distance and reflection, conscious and unconscious motivations, and finally, the ordering of concerns or priorities in a hierarchy of purposes (p. 101). However, these aspects, while providing significant insights on active agency need to be re-emphasised in terms of the specific concepts that underlie their development before ST’s contribution to the study of economic phenomena can be articulated through the *skilful deployment of resources*. As Sydow and Windeler (1997) argued in this respect, economic phenomena are:

“understood as recurrently reproduced in and through social practices (cf. Windeler, 1992, pp. 102-105). This means the economic dimension of social practices is viewed as irremediably linked with other dimensions of the social in praxis. If this interrelatedness matters we need theoretical concepts which explain how economic orientations come into

play, how they are ‘made to count’ and how they get their weight in corporate contexts” (p. 460).

It should be clarified here, however, that this discussion does not purport to replace ST with economic theories for ST is a meta-theory that provides ontological and epistemological guidance to sensitise field research (Giddens, 1984; Sydow & Windeler, 1997). There follows a discussion of how Stones’ analysis of active agency can be strengthened to inform future studies of IOCM and control.

7.3.1. The notion of multiple social systems, and learning and change

A first critique of Stones’ framework refers to that its use of agents’ ‘shifting horizons of action’ and ‘strategic context analysis’ to conceptualise the ‘contexts of relevance’ (Stones, 2005) does not benefit from the context-delimiting properties of the *social system* as employed by Giddens.

Stones refers to the work of Whittington (1997/1992) and Giddens’ conceptualisation of ‘multidimensional social systems’ to emphasise not as much their implications for different levels of analysis in studies of structuration, but the conflicting and plural conditions they pose on agents’ general dispositions and conjuncturally-specific understandings. In this way, Stones emphasises the role of multiple social systems to condition certain latitude to agents’ hermeneutic-phenomenological capacities and, therefore, to influence their ordering of concerns (Archer, 2000). It is concurred at this point that Stones’ emphasis of the phenomenological implications of multiple social systems on agents’ action benefit our understanding of active agency for these illuminate the role of structures in social interaction. However, it is also argued that even though Stones makes good effort to articulate the relationship between active agency and virtual structures, he does not provide for specific theoretical concepts and their in-between

relationships to establish a balance on the emphasis of phenomenology and hermeneutics over action, and therefore, highlight the latter's role in the reproduction of structures.

At this point, it is argued that acknowledgment of *multiple social systems* can contribute to highlighting the ontological potential of these concepts to inform Stones' account of active agency. In detail, social practices emerge and are negotiated through agency within and among multiple social systems, which represent patterns of activities over time produced and reproduced via regularised interdependent relations between individuals and groups (Giddens, 1979, 1984; Sydow & Windeler, 1997). Social systems in turn may be positioned at different levels of analysis and in an overlapping fashion depending on the very 'systemness' of interaction that varies according to the integration of system elements and the permeability of their boundaries (Giddens, 1984). For example, system integration denotes reciprocity between groups of agents or social systems, while social integration denotes reciprocity between agents at the level of face-to-face interaction (Giddens, 1990). Integration does not necessarily involve cohesion or consensus between roles and projects, while reciprocity develops among position-practice relationships that may involve overlaps between social systems with socially constructed boundaries (Cohen, 1989; Giddens, 1984).

Further, interaction in and through social systems involves agents employing their knowledge of interpretive schemes, norms and resources to formulate theories of action that rationalise priorities for their concerns whose pursuance produces and reproduces the virtual structures of signification, legitimation and domination. In this respect, knowledge about how to 'go on' in social interaction always involves consideration of how networked others within or across a social system interpret the projected theory of action (Archer, 2000; Coad & Herbert,

2009; Stones, 2005). At the same time, knowledge about how to ‘go on’ is constructed by agents who may hold multiple roles or positions, e.g. managers of for-profit organisations that are simultaneously members of trade unions and industry round tables, emphasising here moments of interaction where agents transpose their theories of action to different spatiotemporal settings, i.e. social systems. Transposability of theories of action to different contexts and situations, however, provides scope for *learning and change*, both of which are pivotal to the development of capabilities that are essential to the skilful deployment of resources. Learning and change of theories of action, however, which may involve knowledge about how to achieve the skilful deployment of resources, suggest central roles for such theoretical concepts as *dialectics of control, isomorphism, path dependency, contradiction and praxis*.

The notion of multiple social systems, therefore, directs attention to the facilitating role of the aforementioned theoretical concepts to illuminate our understanding of active agency, and among others, the skilful deployment of resources. These concepts emerge from the social embeddedness of agents’ in “structured ‘fields’ in which (as reproduced in the temporality of interaction) actors occupy definite positions vis-à-vis one another” (Giddens, 1979, p. 117, parenthesis in original; see also Sydow & Windeler, 1997, p. 466). Such positions and social systems may be related in a vertical as well as horizontal fashion, e.g. agents occupying simultaneously positions in both the industry sector level such as trade unions, and the organisational level (Dillard *et al.*, 2004). Acknowledgement, however, of multiple social systems at different levels of analysis stimulates researchers of IOCM and control to methodologically bracket agents’ horizon of action, i.e. their strategic context, and therefore, their faced web of position-practices. For example, research could concentrate on how professional

institutes and industry regulatory bodies participate in a web of position-practices with the wider socio-economic system as represented by governmental or international legal conventions to set structuring principles that enable and constrain IOCM and control at the industry sector level (e.g. Dillard *et al.*, 2004).

It is argued at this point, that such conceptualisation of social systems not only contrasts Stones' articulation of position-practice relations as a single-level network of interconnected nodes, but also makes consideration of the previously mentioned theoretical concepts even more significant. This is because multi-level and overlapping social systems involve higher levels of uncertainty as well as power asymmetries, indeterminacy and serendipity. While it is true that Stones (2005) attempts to locate detailed studies of structuration within the broader socio-historical and geographic context, he misses the role of multiple and overlapping social systems to facilitate the conceptualisation of position-practice relations *at different levels of analysis* (see Figure 7.1). He argued for example:

“Simply for practical reasons there would always be limits to how far a study that is historically or geographically expansive could embrace the tenets of strong structuration in the treatment it gave to each and every aspect of its subject matter. The most one could generally hope for would be to establish points of connection between such broad trends and parameters and certain key aspects of the duality of structure and the quadripartite nature of the structuration cycle” (Stones, 2005, p. 127).

It is not intended here to downplay Stones' argument on the practical limits ensuing to the conduct of structuration studies at multiple levels of analysis. What it is intended though is to suggest that multi-level studies can effectively employ Stones' version of ST should researchers of IOCM and control identify appropriate methodological brackets to define social systems. Such bracketing in turn would enable them to examine whether it is appropriate to use the concept of position-practice relationships at different levels of analysis.

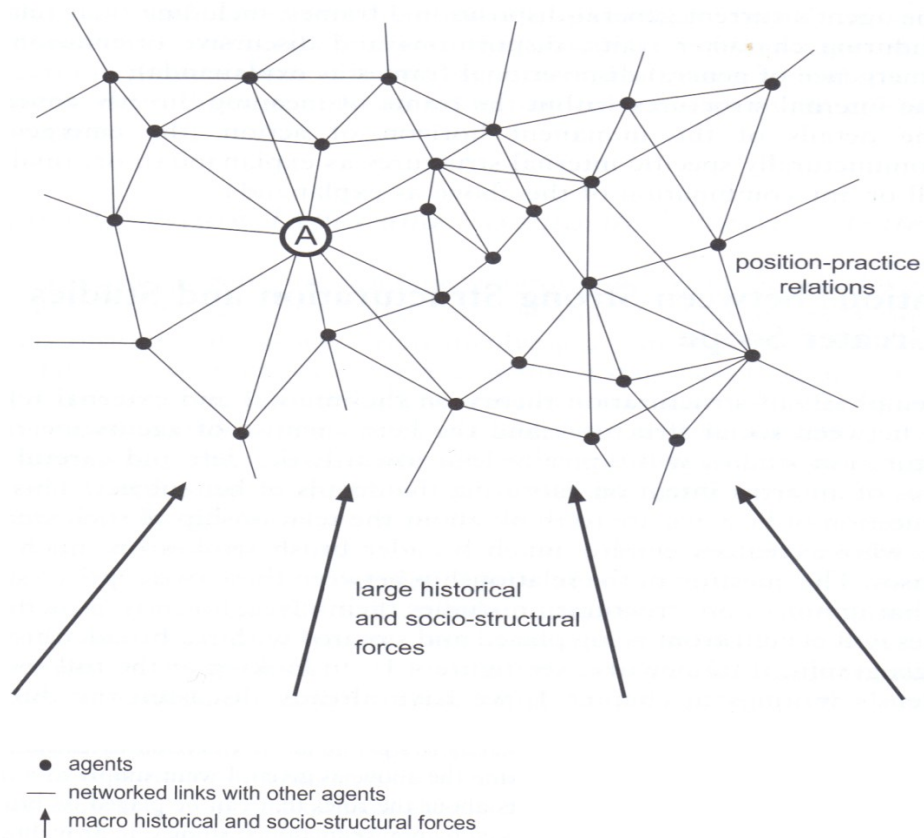


Figure 7.1: Position-practice relations articulated as a single-level network of interconnected nodes and influenced by abstract socio-historical forces (adapted from Stones, 2005, p. 128)

There follows discussion of how the aforementioned theoretical concepts contribute to Stones' account of active agency and to a rationalisation of the conditions through which IOCM and control practices are enacted.

7.3.2. Theoretical concepts contributing to Stones' (2005) account of active agency

One of the concepts that were argued previously to contribute to Stones' account of active agency is that of the *dialectic of control*, which examines power asymmetries in the deployment of capabilities and resources.

The dialectic of control highlights that action is socially embedded suggesting here that the outcome of an agent's, e.g. manager's, conduct is contingent on how others react. This concept, therefore, highlights that all social praxis is constituted by a fragile balance between relations of domination and dependence in the pursuance of ordered concerns, e.g. specific strategies that aim at the reconciliation of conflicting ends in the management of IORs (Archer, 2000; Giddens, 1984). For example, regardless of how dominating was MarineCo relative to its suppliers, the latter were shown to possess some resources, which they employed to mediate the adverse consequences on their performance from MarineCo's checking controls.

Another concept which implicates action and the skilful deployment of resources is *isomorphism*. Isomorphism suggests co-evolutionary processes and involves the adaptation of agents' internal structures "to provide solutions to similarly shaped problems in other contexts" (Coad & Herbert, 2009, p. 190). It also involves "the adaptation of an *institutional practice* by an organisation" (Dillard *et al.*, 2004, p. 509, emphasis added) as a result of mimetic, coercive and normative motivations. The skilful deployment of resources, therefore, is implicated by the concept of isomorphism, which arises from agents' interactions among multiple and often overlapping social systems, a process that in turn offers opportunities for learning and change. This is because adaptation of agents' hermeneutic-phenomenological capacities to inform action at different contexts can often lead to outcomes that are not fully predictable (Dillard *et al.*, 2004; Sydow & Windeler, 1997).

According to DiMaggio and Powell (1983), coercive isomorphism refers to the irresistible and independent causal influences, in Stones terms, exerted on a social system by another dominant party, and broadly by distant others such as the wider socio-economic system, e.g. for

MarineCo the ISM Code and the SOX Act. Mimetic isomorphism on the other hand, refers to those circumstances where a social system attempts to imitate a more successful one when it is uncertain and lacks the knowledge about how to 'go on'. Finally, normative isomorphism involves adaptations in agents' actions through professionalization, which refers to a collective attempt by members of an occupation to distinguish their work by defining rules and conditions. For example, the employment of Lloyd's Register 'best practice' guide to inform the IOCM and control practice in ships' repairs was a result of mimetic and normative isomorphism; normative because the guide was drafted by engineers who defined rules in ships' repairs, and mimetic because MarineCo purchased the guide in order to develop its knowledge base in ships' repairs. However, apart from co-evolutionary processes, *path dependency* is another enduring characteristic of interaction in social systems.

Path dependency refers to the reproduction of structures and is largely an outcome of the institutionalisation inherent in social interaction. The concept indicates how choice of modes of action in the past narrows perceptions of viable alternatives for action in the present, and therefore, the potential for change. Therefore, path dependency describes the persistence of social practices and the stability of social systems indicating a possible source of resistance to change and continuity in the way resources are deployed over time. It suggests that social practices and, therefore, the deployment of resources are characterised by a level of predictability, stability and order across time and space, which may be a result of agents' conscious or unconscious need for ontological security that is in turn motivated by their efforts to cope with anxiety. However, path dependency does not rule out searching for alternatives in the instantiation of social structures,

calling for a consideration of the conditions under which these alternatives can be rejected or adopted (Modell *et al.*, 2007).

A fundamental insight to the process of searching for alternatives, and which involves opportunities for learning and change in the deployment of resources, provides the concept of *contradiction*. According to Giddens (1984), structural contradictions refer to inconsistencies and tensions between chronically reproduced properties of social systems. Coad and Herbert (2009) contributed in this respect a wider conceptualisation of contradiction in the form of inconsistencies, i.e. mental crisis situations, between what one knows as represented in their internal structures and what one experiences in unintended consequences or as contradicting understandings of powerful agents-in-context. Moreover, the concept of contradiction is related to the concept of the dialectic of control, which attempts to provide some sort of balance between inconsistencies and tensions in the reproduction of contravening structures residing within a social system or among social systems (Giddens, 1984; Macintosh, 1994).

However, while contradiction explains why and when agents might question existing routines, it is the concept of *praxis* and its constitutional role in the reproduction of structures that provides the mediating mechanism between institutional embeddedness, e.g. in the way resources are deployed, and contradiction and change. This is because praxis, i.e. tacitly or discursively motivated action, exists in a duality with structure through the latter's virtual habitat in agents' mindsets. Praxis, therefore, is not merely reducible to action that interconnects social systems, rather it "should be regarded as synonymous with the constitution of social life" (Cohen, 1989, p. 12). Moreover, praxis comprises not only a reflective process during which agents evaluate their faced web of position-practice relations searching for alternatives, but also an active process.

During the active process agents engage in political activity to influence change of existing structural configurations through for example addressing incidents of contradiction, engaging in dialectic of control or through taking isomorphic initiatives.

The previous discussion outlined major theoretical concepts that are argued to contribute not only to Stones' account of active agency, but also to research in economic phenomena such as IOCM and control. There follows discussion of how the aforementioned concepts offer insights on the skilful deployment of resources and the generation of surplus that underpin, among others, IOCM and control.

7.3.3. Theory refinements contributing to a structuration perspective of IOCM and control

The constitutional role of praxis to reproduce structures of signification, legitimation and domination through their instantiation in specific spatiotemporal settings involves all three forms of interaction, namely communication, power and sanctions. These forms of interaction in turn provide the mediums through which dialectics of control, path dependency, isomorphic initiatives and contradiction materialise in specific time and place locations.

Moreover, agency as expressed through praxis implies the deployment of capabilities and the exercise of power, which is central to the practice of IOCM and control. Giddens defined power as “the capacity to achieve outcomes” (1984, p. 257). Outcomes are generated through managing authoritative and allocative resources that produce and reproduce structures of domination. Allocative resources refer to the distribution of material objects, while authoritative resources refer to the management and organisation of agents or groups of agents, something which implicates the way their interests are represented. Authoritative resources, therefore,

inevitably relate to legitimation structures because the relational power implicated in the organisation of multiple social systems ascertains which of their interests is to be perceived as legitimate. The coordination of agents in a network of social systems, and therefore, in IORs or networks of IORs “necessarily involves a definite combination of these two types of resources” (Giddens, 1984, p. 258; see also Sydow & Windeler, 1997).

The reproduction of structures of domination, which is “an expandable property of social systems” (Giddens, 1984, p. 258; see also Sydow & Windeler, 1997), through the management of resources that “form the media of the expandable character of power” (Giddens, 1984, p. 258; see also Sydow & Windeler, 1997), is centrally implicated in praxis and influences what is perceived as legitimate and what counts as meaningful. This suggests a role for resource management in the generation of power and the reproduction of structures of signification and legitimation. Issues of power and domination are also central to the consideration of economic phenomena in ST. This is because power involves the capacity to achieve outcomes, which in economics, refer to the capacity to achieve economic performance as reflected in measures of efficiency and effectiveness (Giddens, 1979; Sydow & Windeler, 1997). From a ST perspective, however, economic performance as recorded in specific measures of a financial and non-financial nature is not determined by given and value-free imperatives abstractly set by the market, but is negotiated, i.e. produced and reproduced, by multiple individuals or social systems through structures of domination, signification and legitimation. This suggests that measures of financial performance, e.g. VCA, are socially constructed and are not only the outcome of IOCM and control practices, but also the mediums through which future IOCM and control practices are enacted (Sydow & Windeler, 1997, 1998).

Notions of performance on the one hand and structures of domination, signification and legitimation on the other are, therefore, recursively related. Moreover, insights on the skilful or otherwise deployment of resources to achieve economic performance, and therefore, some kind of surplus through e.g. IOCM and control practices, can be provided by the theoretical concepts which were proposed previously to contribute to Stones' (2005) account of active agency. In this respect, the recursive relationships between notions of performance in IOCM and control with structures of domination, legitimation and signification, suggests an important role in the realm of praxis for not only relational power and dialectics of control, but also for isomorphism, path dependency and contradiction.

So for example, modes of IOCM and control enable powerful agents and social systems to reproduce their domination in the inter-organisational nexus, while at the same time this reproduced domination enables the reproduction of the specific modes of IOCM and control. Similarly, legitimation and signification structures of what counts as legitimate and meaningful are recursively related to the praxis of modes of IOCM and control. That is, enactment of certain cost management practices, e.g. VCA or target costing, and their successful performance effects may culminate in them becoming accepted practices of IOCM and signify what counts as 'performance'. Enactment, therefore, of IOCM and control practices involves the instantiation of rules and interpretive schemes, which collectively carry knowledge of achievements and failures in the past and expectations for future action, reproducing structures of signification and legitimation that may be shared within the organisation, the inter-organisational context and the wider socio-economic system.

These recursive processes, however, can be implicated by dialectics of control since the interacting social systems, e.g. an inter-organisational network, possess varying levels of power, which they employ to mutually constitute praxis of IOCM and control. The success of social systems or individuals dominating the conjuncture to impose their cost structures and financial calculations is conditioned by the relational power of other stakeholders, such as groups of managers, to interpret these structures and calculations in ways that serve their preferences and interests (e.g. Boland, 1993; Coad & Herbert, 2009; Macintosh & Scapens, 1990; Roberts & Scapens, 1985). Further, isomorphism can facilitate reproduction of structures of domination, signification and legitimation and, therefore, reinforce path dependencies when the outcomes of the isomorphic process sustain the prevailing structures of what counts as meaningful, acceptable and viable performance. At the same time, however, isomorphism may be motivated out of incidents of contradiction and calls for change when the prevailing structures of signification, legitimation and domination highlight inconsistencies with a new situation or lack of expertise to deal with it.

In summary, recursive interactions between praxis and structure indicate that reproduction or change of IOCM and control structures amidst a multitude of social systems is mediated by dialectics of control, path dependencies, contradictions and isomorphic initiatives that maintain or change what is considered to be acceptable, meaningful and power-endowing resource management to achieve performance. This Section sought to highlight the enabling role of the aforementioned concepts to inform a structurationist study of IOCM and control informed by Stones (2005). Besides, insights from this Section will be employed in the Conclusions Chapter

to suggest opportunities for future research. There follows, in the next Section, a discussion of the limitations, which impinged on the research.

7.4. A reflective account of the limitations of the research

As with any piece of research so does this one suffer from some limitations, which need to be acknowledged before the reader can assess its robustness.

Limitations to the research emerged from the obstacles the researcher encountered as he set to undertake his case study. As it was discussed in Chapter 4, while the researcher originally aimed at extending his fieldwork to some of MarineCo's suppliers and charterers, and get what Caglio and Ditillo (2008) called a *multiple point of view* research account, he was not given access to do so because the general manager expressed concerns that the research might cause uneasiness and suspicion to these parties. This restriction hampered opportunities for examining the external structures, internal structures, action and outcomes of agents-in-focus positioned outside MarineCo's boundaries.

In this respect, the potential of Stones' framework for treating agents-in-focus as both first and third person to facilitate understanding of position-practices outside MarineCo's boundaries was not exploited to its full extent. Instead, the researcher had to approach agents-in-focus who were MarineCo's suppliers and customers *merely as third persons* through examining the action-informing conclusions of agents-in-focus who were positioned *within* MarineCo on the external structures, internal structures, actions and outcomes of these agents. While the researcher employed documents generated by suppliers and customers to proxy *their* quadripartite elements and, therefore, to treat them as first persons through obtaining some sort of 'primary' information

on the above elements, he acknowledges that Stones' potential for a 'composite study' to examine IORs and IOCM and control was not fully exploited.

Moreover, the researcher did not manage to get an interview from the founder of MarineCo whose role was instrumental to the research setting. While the researcher had the opportunity to observe the founder's interventions and participation in the daily conduct of the business and benefit from some discussions at the introductory phase concerned with the purpose of the research, he had to abandon the opportunity for an interview after the founder had repeatedly postponed and ultimately rejected to give the interview due to his heavy schedule. However, the researcher managed to get insights on the founder's conjunctural understandings, dispositions, action and outcomes from observations of his presence at MarineCo's daily flow of business and from the discussions he had with top management, which stood in for him at the organisation.

Further, the researcher as soon as he embarked on his research encountered difficulties referring to issues of trust and politics at MarineCo. A distrusting environment coupled with employees' busy schedules and relative lack of background knowledge in issues of cost management and control necessitated the researcher to review his loosely-structured interview guide. At this point, the researcher modified and decreased in number the loosely-structured interview questions, still though in keeping with the general questions supported by Stones (2005), to reflect issues more specific to MarineCo's context and achieve interested and informed responses. However, the fact that the researcher did not force theoretical preconceptions about IOCM and control in his modified interview questions were in line with the philosophical assumptions underpinning his research. The reason, however, for recognising the modification of

the interview questions as a limitation is because the researcher wished to address more informed questions on specific IOCM and control techniques in order to examine the interviewees' reactions. It should also be mentioned that the researcher would have been in a much more informed position to draft interview questions in the spirit of Stones (2005) had he attended a seminar by Robert Stones, on his quadripartite framework, prior to designing his case study guide and engaging with the fieldwork. The seminar took place at the University of Essex in late January 2009 when the researcher was already writing up his thesis. However, it still contributed a lot to the researcher's interpretation of findings.

Another limitation, from the functionalist point of view, refers to the fact that this research involves a single case study whose findings cannot be generalised to e.g. other organisations in the transportation sector in general or the shipping sector in particular. As Yin (2003) observed in this respect, "case studies, like experiments are generalisable to theoretical propositions and not to populations or universes" (p. 10). According to the philosophical assumptions of the research, the purpose here was to get an in-depth understanding of issues of IOCM and control through exploring, describing and explaining the conditions and circumstances under which MarineCo developed such practices.

Further, while Chapters 4, 5 and 6 aimed at establishing the trustworthiness of the research (see Ahrens & Chapman, 2006) through providing detailed explanations of the steps taken to enhance its procedural reliability and contextual validity, some limitations ensue. In this respect, the fact that the researcher transcribed and translated the interviews could be seen as a compromise to procedural reliability. However, resort to a translator was beyond the budget limits of the PhD project and further it was argued that analysis and interpretation of the case

benefited from this process. Moreover, an obstacle to enhancing the contextual validity of the research involved the inability to feedback the case study report to the subjects of study. That was so because ethical commitments overrode the requirement to strengthen contextual validity. Another obstacle to contextual validity surfaced from the inability to pursue the 'check-coding' exercise with third person(s) given that they should be knowledgeable of Stones' version of ST and that the researcher knew none apart from a few academics. The researcher decided to not seek the active involvement of academics at this point because he did not wish to share responsibility for his research analysis.

Finally, another limitation emerges from the fact that the study of social phenomena such as IOCM and control from a structurationist perspective ideally requires the object of study to be investigated on a longitudinal basis. However, the limited time resources for undertaking a PhD did not allow such an option. As regards the benefits of a longitudinal case study in drawing more credible research conclusions, however, the researcher would like to quote Busco et al. (2007), who argued that [...]

“despite the length of time spent within an organizational context researchers need to confront the impossibility of fully representing and understanding the object of their enquiry as if it was out there, evolving in front of them along a linear pattern [...] Information on the project's length and data collected may aid others to reflect on the interpretive journey the researcher undertook and the conclusions he has achieved, but they cannot be perceived as comprehensive and wide-ranging accounts which illuminate the processes of management accounting change” (p. 140).

Besides, this argument of Busco et al. is in agreement with the philosophical assumptions underpinning the research, which acknowledge that knowledge claims are inherently temporal, spatial and contextually-constrained and that social 'reality' is relative and complex.

In what follows, some concluding remarks are provided.

7.5. Recapitulation

This Chapter engaged with a discussion of the findings at MarineCo with the aims of not only addressing the research questions through the lenses of Stones (2005), but also discussing the contribution of the case to the existing literature in IOCM and control. The research questions were answered, and through this process, the strengths of Stones' framework were highlighted. Further, the Chapter engaged with a critical evaluation of Stones (2005) with the purpose of suggesting improvements to the framework to guide future research in IOCM and control. This project culminated in a set of theoretical concepts that were argued to add to the framework's account of active agency and its potential to highlight issues involved with the deployment of resources and the generation of surplus. Such issues are centrally implicated in economic phenomena, particularly in capitalist societies (DiMaggio & Powell, 1983; Giddens, 1984). This set of concepts will be employed in the following Chapter to propose opportunities for future research. Finally, the Chapter engaged with a meticulous account of the limitations impinging on the research.

CHAPTER 8

CONCLUSIONS

8.1. Preamble

This Chapter provides an account of the conclusions that are drawn from the study. It first considers the main findings against each of the research questions at Section 8.2. Following this, attention shifts to consider a number of contributions emerging from the research in Section 8.3. These comprise contributions to practitioners of IOCM and control, to the literature, to Stones' theoretical framework, and to the research strategy. Thereafter, the Chapter provides a reflective account of what the researcher learnt throughout his doctoral studies in Section 8.4, and finally, it culminates with suggestions for future research in Section 8.5.

8.2. Main findings

The previous Chapter considered how the findings address the research questions. There, the questions were addressed implicitly, i.e. in the form of a coherent story, through employing Stones' quadripartite framework in a guiding manner. Here, however, the researcher considers how the findings at MarineCo address each of the research questions. This takes place in order to assist the reader to appreciate how each research question was addressed by specific aspects of the findings. The research questions emerged from the overall aim driving this research, which was to *examine the forces that facilitate and/or hinder the adoption of cooperative cost management and control practices in IORs*.

1. What are the IOCM and control practices of MarineCo? Do these support a cooperative and mutually beneficial or a competitive approach? Are they formal, accounting-based and bureaucratic or informal?

MarineCo's IOCM and control practices with suppliers comprised bureaucratic and competitive-based formal controls of a cost and non-cost based nature that were supplemented with informal

controls that mainly aimed at pushing suppliers' to improve their prices and also to protect MarineCo's power position. In particular, MarineCo's formal cost management practices involved the establishment of a rank-based order allocation policy that was filtered from a competitive-bidding practice where at least three highly performing suppliers submitted their quotations for comparison. This procedure was taking place through the 'comparative matrix' evaluation and the 'job order' forms.

The aforementioned cost management practice was pursued through HERMES, an integrated information system that provided a standardised interface where the 'comparative matrix' evaluation and the 'job order' forms were interconnected with the budget, holding in this way, the procurement departments accountable to top management and Accounts. HERMES facilitated MarineCo's dominance over suppliers via providing a means for monitoring their offerings. The standardised interface of HERMES, therefore, limited suppliers' scope for opportunistic behaviour, while it kept procurement-involved agents accountable through the signed approval of designated signatories at critical steps of the procurement process.

In addition to HERMES, a newly introduced control function at MarineCo reinforced the bureaucratic nature of its supply cost management practice and helped to address a major concern in the organisation's agenda, i.e. the ethical conduct of supplier relationships. The Checking office monitored the effective performance of MarineCo's IOCM and control procedure by procurement managers, while it also sought to eliminate suppliers' opportunistic behaviour. At the same time, however, MarineCo's formal IOCM and control practices with suppliers were supplemented with informal controls that involved procurement managers engaging with coercive bargaining, 'freezing' order allocations to underperforming suppliers, and resorting to

previous experience and bonds of friendship as a means to tempering suppliers' reactions in those cases where MarineCo failed to pay in time.

Besides, MarineCo's IOCM and control of supplier relationships also benefited from facilities offered by stakeholders in the industry and suppliers' self-regulating mechanisms. Procurement-involved agents employed the suppliers' association catalogue to engage with low risk supplies at a distance and referred, where that was necessary, to the standard provisions for contract drafting propagated by the association. At the same time, they resorted to the assurance services of quality testing organisations in order to mediate disputes with suppliers on the quality of the purchased product as well as to price assessment reports provided by analysts in order to facilitate competitive-bidding with certain suppliers.

On the other hand, MarineCo's IOCM and control practices with customers were also predominantly arm's-length and bureaucratic, and mostly an outcome of institutionalised industry practices, which MarineCo managers adopted in order to protect the organisation's position against the requirements of dominating customers. Contractual agreements of a short and long-term nature, i.e. spot and time-charter parties respectively, provided the major governance means for regulating the relationship through reconciling expectations, clarifying operational commitments and penalties as well as cost and revenue patterns. MarineCo's dependence on customers and their lobbied requirements motivated the organisation to adopt two internal management control systems, namely PMS and Inventory Collector. These controls strengthened the organisation's profile and negotiating position to customers who were seeking assurances that the organisation could offer uninterrupted vessel operations. This imperative also promoted the

maintenance of alternative sources of spare parts' supplies in order to satisfy charterers' requirements for incident-free vessel operations.

Moreover, MarineCo's IOCM and control of relationships with customers comprised services offered by third parties that were employed to determine the hire payable by the customers. These involved obtaining values for variables of hire determination through seeking consultation from market indexes and the hire assessment services provided by market analysts. Further, formal management control practices involved the adoption of industry standards for business conduct. For example, agents involved with customers often required to have the 'right of first refusal'. This refers to a promise given by the counterpart organisation, in this case the customer, to give MarineCo priority to quote for a future contract before other shipping organisations are contacted. This right is offered in exchange of a party's high performance and goodwill in the past. Further, formal controls comprised MarineCo managers' resorting to the safeguards offered by P&I Clubs, which the organisation employed as a means to motivate customers pay hire before resorting to arbitration or a court of appeal.

Within this largely deterministic context, however, MarineCo has been one of a few early adopters of profit sharing. Profit sharing agreements strengthened MarineCo's profile relative to customers and formed a major revenue management mechanism that along with informal controls contributed a sense of reciprocity to the highly arm's-length and standardised conduct of IORs with customers. Informal controls involved not only employing previous experience with customers in order to mediate the organisation's underperformance, but also demonstrating readiness to operate beyond the terms of the charter party to satisfy the customer's unforeseen needs. However, agents at MarineCo reported that in incidents of underperformance informal

controls were effective to by-pass customers' sanctions and coercive behaviour so long as the latter were not financially affected.

The aforementioned research evidence highlighted MarineCo's nature of IOCM and control practices. However, interesting aspects of the research surfaced from considering *why* and *how* MarineCo established, maintained or changed its set of IOCM and control practices. The answers to the following research questions provide for the *dynamic* and *processual* elements involved in a structuration study, which in Stones' terms lead the interplay between external structures and internal structures on the one hand, and active agency on the other.

2. Why has MarineCo established these IOCM and control practices and how have these practices been maintained or changed in recent years?

This research question is addressed through the answers provided to the following sub-questions:

- 2.1 What has been the role of MarineCo's organisational structure in embedding a cooperating and trusting or a competitive and dominating perspective in the cost management and control practices of its IORs? How did this take place?

A number of characteristics pertaining to MarineCo's management structure conditioned the way IOCM and control was pursued. For example, despite the fact that the organisation had recently been listed on a major stock exchange, it still remained family-managed, as the founder actively participated and enforced his perspective to the daily flow of the business. The founder diffused a cost stringent perspective to the management of IORs with suppliers and customers, which was complemented by continuous efforts to demonstrate professionalism to customers. A cost stringent perspective in turn to the management of IORs, particularly to IORs with suppliers,

acted as an external structure to procurement-involved agents and gave place to cost management practices based on competitive-bidding. For IORs with customers, cost stringency materialised through efforts to deliver services at the lowest possible cost, while keeping to the terms of the charter party with the purpose to avoid penalties from dominating customers.

At the same time, incidents of fraud between MarineCo's procurement managers and certain suppliers spawned an outcry for the formalisation of the procedures underpinning IOCM and control. Such incidents motivated the Accounts and Internal Audit to reproduce and reinforce existing structures on the avoidance of informally coordinated long-term relationships through establishing strict bureaucratic procedures that relied on a competitive-bidding approach. In this respect, procurement-involved agents' knowledge of the context of action highlighted the potential of collaborative IORs to provide scope for fraudulent action. They suggested that competitive-based order allocations not only minimise MarineCo's dependence and eliminate suppliers' scope for opportunistic behaviour, but also demonstrate ethical conduct and eliminate distrust within and across the organisation.

Distrust and power asymmetries within MarineCo emerging from the fraud experience and the founder's paternalistic approach respectively comprised the major structural properties underpinning the organisation's management structure. The formalised IOCM and control procedure reproduced these properties and aimed at ensuring that practice of IOCM and control was pursued on the basis of observable procedures facilitating the transparency of transactions. This tenet was even more important for supplier relationships, rather than customer ones, because the latter were always coordinated through contracts, providing in this way, adequate transparency to their cost management and control. Distrust, therefore, and paternalism within

MarineCo were driving forces that embedded an arm's-length perspective to the cost management and control of the organisation's IORs.

At the same time, the need to maintain MarineCo's dominance over suppliers combined with the need to prevent fraud and demonstrate ethical management, conditioned the introduction of management controls, namely HERMES and Checking, which further reproduced an arm's-length perspective to IOCM and control. Both HERMES and Checking reinforced procurement-involved agents' general dispositions on the need to prevent suppliers from cheating and demonstrate ethical selection of suppliers through exercising a competitive-bidding approach.

In summary, the organisation's internal agenda was conditioned by calls for ethics in the management of IORs, which combined with management's paternalistic approach, implicated processes of structuration within MarineCo that produced and reproduced distrust and increased monitoring to maintain MarineCo's dominance or mediate its dependence.

2.2 What has been the role of relational organisations such as suppliers and customers or other significant agents outside MarineCo, such as regulatory bodies, in influencing the cost management and control practices it enacts in its IORs? How did this take place?

MarineCo's IOCM and control practices were not only outcomes of structuration processes that involved position-practices within MarineCo. These practices were also conditioned and facilitated by a web of position-practices located externally to MarineCo's boundaries. These networked others engaged in the duality of structure with agents at MarineCo to produce and reproduce the organisation's IOCM and control practices.

A distinctive group of position-practice relations that formed independent causal influences to MarineCo's control practices comprised regulators. The shipping industry is a highly regulated sector (see Grammenos & Choi, 1999), and among others, the regulations of IMO condition shipping organisations' practices. For example, the ISM Code was a major regulation that influenced the redrafting of MarineCo's internal and inter-organisational procedures, something that reinforced the organisation's perspective towards adopting arm's-length, rank-based practices of IOCM with suppliers. The major aim of ISM was to embed management systems that would contribute quality shipping, i.e. environmentally safe and secure carrier services; a requirement also posed by the customers. MarineCo's Q&S department, which was responsible for adapting the organisation's policies and procedures to regulatory requirements and customers' guidelines, interpreted the standards posed by ISM as requiring the organisation to ensure the undisputed quality of its services.

Regulatory and customer requirements constituted external structures for agents at Q&S and were reflexively monitored through their internal structures as calling for a competitive-based approach to IOCM and control with suppliers. Such approach was favoured because it could ensure undisrupted shipping operations through the maintenance of alternative supply options. The outcome of this structuration process was, therefore, to reinforce the organisation's arm's-length perspective of IOCM and control. This is explained by the fact that agents at Q&S bore internal structures, which highlighted not only the need for MarineCo to offer undisrupted vessel operations, but also top management's attachment to a competitive-based approach.

Another influence from the industry, which reinforced MarineCo's competitive-based approach to supply IOCM and control, involved a set of publications issued by Lloyd's Register

classification society. Such publications propagated the adoption of a rank-based suppliers' evaluation list and the contribution of competitive-bidding as well as the organisation's negotiating power to maintain alternative supply options. Agents at Q&S incorporated the publications' guidelines to the ISM-inspired manual and, therefore, reinforced the already embedded conjunctural understandings of agents at MarineCo, which emphasised the desirability and effectiveness of an arm's-length approach, not least because it was also promoted by industry stakeholders.

Besides, MarineCo had to comply with the SOX Act, which was an independent causal influence to MarineCo, in order to demonstrate sound corporate governance. In this respect, while the internal auditors revised the ISM-inspired IOCM and control procedure in order to comply with the SOX Act, its reformulation primarily involved the incorporation of further control hurdles to make it more formal, transparent, and bureaucratic. A major aim of internal auditors was to reinforce procurement-involved agents' understandings on their need to provide objective evidence to justify supplier selection based not only on the cost of their offering, but also on other criteria such the quality of supplies and their availability. According to the auditors, this could only be ensured through formal, accounting-based controls, which were seen to meet the requirements of SOX and which could be verified by the Checking office.

Apart, however, from the role of regulators to reinforce an arm's-length perspective in MarineCo's IOCM and control practices, there have also been suppliers and customers' self-regulating institutions, as well as other stakeholders constituting industry practice such as market analysts. These distant to specific IORs social systems provided facilities that influenced knowledge and understandings at MarineCo with respect to the nature of the IOCM and control

practices that could be enacted. For example, the suppliers' association services contributed to procurement managers' perceiving that the coordination of supplier relationships could best be pursued through standard interfaces. Reinforcing influences on the potential of an arm's-length approach to ensure the efficient and effective conduct of IOCM and control were also posed from market indexes as well as price assessment analysts, whose services were seen by the parties to provide a mutually acceptable basis to the formulation of hire. In this way, an arm's-length approach to the revenue management of customer relationships was also embedded in agents' mindsets.

Another example, of the reinforcing influences posed by institutionalised industry practices to the management of IORs with customers was the fact that charter parties that comprise the major control means of a chartering relationship are largely standardised as a result of recursive interrelationships between shipping organisations, customers and regulators. Further, customers' self-regulating guidelines for safe and uninterrupted carrier services conditioned the development of management controls at MarineCo. These management controls in turn necessitated that relationships with critical suppliers should be based on the principle of maintaining alternative supply options in order to avoid engine breakdowns and penalties from customers over a long period of time. An arm's-length perspective to the management of critical suppliers was also, therefore, reinforced through customers' guidelines, which represented irresistible causal forces to MarineCo.

In summary, research evidence at MarineCo highlighted that active agency in both IORs with suppliers and customers were not only conditioned by 'situational tendencies' (Stones, 2005) within the organisation, but also by influences posed by independent and distanced others.

In such circumstances, Stones (2005) observed that the potential of agents to drastically change their conduct and the external structures is limited because [...]

“[m]any of the things an agent does will be experienced, more or less tacitly, as things that are required of them by their embeddedness in a particular range of position-practices” (p. 113).

In this respect, agents at MarineCo explained that their practices were embedded within a largely deterministic context, which promoted market-type controls that were perceived by engaging parties in IORs as objective and reliable to coordinate the relationship.

3. What are the intended and unintended effects of MarineCo’s IOCM and control practices and how have these affected or are likely to affect in the future the management of the organisation’s IORs?

Intended and unintended influences of MarineCo’s IOCM and control practices and their effects on the management of the organisation’s IORs can be traced back to the early 90’s where incidents of fraud were revealed. Acknowledgement that suppliers were increasingly taking the organisation for granted also indicated that MarineCo’s IOCM and control procedures were ineffective. These incidents were perceived as unintended consequences by top management and resulted in the reformulation of MarineCo’s IOCM and control practices with suppliers. The need for such reformulation was imminent given the adverse consequences such incidents had on MarineCo’s morale, dignity and ultimately to its viability.

Against this distrusting context, and given the founder’s cost-stringent and paternalistic perspective, the organisation’s reformulated IOCM and control practices embedded power asymmetries and reproduced distrust *within* MarineCo. However, while the reformulated IOCM and control practices reproduced power asymmetries and distrust within MarineCo, i.e.

reproduced the very conditions that motivated their establishment, they also spilled over these conditions to the *inter-organisational domain* through embracing, as mentioned previously, a number of arm's-length cost management and control mechanisms.

In this respect, the Checking office produced such management controls that had unintended consequences and influenced the organisation's IORs with suppliers. The founder's direction to Checking to adopt a rather cost stringent approach to the clearance of suppliers' invoices led to considerable delays in their payment. As a result, uneasiness emerged among procurement-involved agents who expressed limited capacity to secure from suppliers higher discounts, extended credit time and rebates. Besides, a number of suppliers started sending reminder letters to MarineCo requesting immediate payment under the threat of legal redress. This example highlights how distrust and power asymmetries within MarineCo that motivated Checking's establishment, spilled over to the organisation's relationships with suppliers, reproducing in this way the very structural properties that set this control function in place. Further, while some procurement agents at MarineCo exhibited critical distance and adequate knowledge of the situation, they did not actively address the issue with top management and suggested that it is up to the latter to revisit Checking's operation.

While, however, the status quo was maintained in the case of Checking, with the exception of remedial action taken sporadically to prioritise payment of critical suppliers, there were cases where unintended consequences from MarineCo's IOCM and control practices stimulated change that affected the management of the organisation's IORs. One such example refers to cases where the competitive-bidding practice could be superseded, i.e. in the procurement of critical supplies. This was an exception incorporated in the organisation's

procedures following supply managers' request; it would apply in emergency situations in order to save MarineCo from unintended consequences in its relationships with customers.

At this point, the researcher would like to draw two conclusions on the potential future effects of MarineCo's cost management and control practices to the management of its IORs. First, the organisation's internal agenda as largely influenced by the founder's distrust and his paternalistic approach, has enforced and reinforced a distrusting perspective to the management of its IORs. It is argued here that this perspective is likely to perpetuate the adversarial aura underpinning the organisation's relationships in the future given the fact that middle-level managers or even top management did not appear willing to act against the major principles of his management.

"This is a family business, a traditional shipping company where we are complacent and afraid at the same time that if we 'move the vessel' someone may fall off [...] what applies in this company is the ancient Greek saying that: 'only out of need can the Gods be persuaded to change' [...] Now, however, we realise that there is reason for things to change but what I say is that nothing can change if it has not received the founder's blessing" (Human Resource Manager).

Second, MarineCo's compliance with SOX and its efforts to respond over-and-above customers' requirements highlighted that at the time of the research the organisation was still at a phase of developing its internal control systems. It is argued here that MarineCo was concerned with strengthening its profile through developing its internal control functions, e.g. establishment of PMS and Inventory Collector, which as mentioned previously, impacted on the organisation's IOCM and control practices. However, the potential of revisiting the *fundamental assumptions*, i.e. *competitive versus collaborative*, underpinning MarineCo's IOCM and control practices had been obfuscated by the focus on internal controls and operational excellence as well as by

structures external and internal to MarineCo, which as mentioned previously, reinforced an arm's-length approach to the management of the organisation's IOR.

There follows, a discussion of the contributions of this research.

8.3. Contributions

The contributions of the research are distinguished among contributions to practice/practitioners, contributions to literature, contributions to theory and contributions to the research strategy.

8.3.1. Contributions to practice/practitioners of IOCM and control

Research at MarineCo provides a number of contributions to practitioners of IOCM and control. At first, the research findings echo management accounting and organisation researchers who have argued, even from a functionalist perspective, that practitioners should not unquestioningly copy and paste prescriptions of celebrated novelties in management accounting to their organisations without first examining whether the novelty 'fits' with the specific circumstances pertinent to the organisation and its wider institutional context (see also Cox, 1999, 2001, 2004; Sydow & Windeler, 1997). In this respect, research at MarineCo highlighted that the propagated assumption of cooperative arrangements underpinning the nature of IOCM and control (see also Coad & Cullen, 2006) may not be relevant to address the coordination requirements of IORs under all circumstances⁴⁶.

⁴⁶ Refer in this respect to Sections 6.2 and 6.3, which highlight the role of power asymmetries and dependencies between MarineCo and its suppliers and customers as well as of power asymmetries, distrust and paternalism within MarineCo to favour the adoption of predominantly arm's-length and competitive modes. Moreover, Section 6.4 highlights how the adoption of certain technologies and control functions within the organisation restricted the consideration of alternative modes of IOCM and control to the arm's-length practices that were already employed. Finally, Section 6.5 refers to the reinforcing influences of institutionalised practices in the industry as well as of regulations in embedding a competitive rather than cooperative approach to IOCM and control.

For example, it was shown in Section 6.3 that MarineCo's history and specific characteristics largely influenced its approach to the management of IORs. It is suggested here that managers and other learning-inclined individuals seeking to introduce practices of IOCM and control, should first reflect whether their organisation is more apt to a collaborative or competitive approach. At this point, the case at MarineCo should inspire managers to examine how issues of power and trust implicate and are implicated at the same time by position-practice relations within the organisation (see Sections 6.3 and 6.4) before they can assess the organisation's propensity to sustain a cooperative approach to IOCM and control.

Moreover, case research at MarineCo draws the attention of practitioners of IOCM and control on issues implicated from the wider industrial and institutional context where these organisations are located (see Section 6.5). For example, practitioners may find that the development of relationship-specific IOCM and control arrangements, e.g. based on intensive cooperation and information exchange, is not necessary because standard modes for coordinating costs and resources in IORs may be available in the industry as part of institutionalised practices (see Subsections 6.5.2, 6.5.3). In other words, case research at MarineCo directs practitioners to examine the wider industry context in order to assess the need to develop IOCM and control practices *in-situ* given the potential influences from institutionalised industry practices. For example, research in Subsection 6.5.2 highlighted that the use of open-book accounting in relationships with customers, and generally resort to management accounting information, was abandoned because institutional stakeholders in the shipping industry provided information services on matters of cost and revenue management that were mutually perceived as objective and reliable by the parties.

At the same time, practitioners should reflect on the regulatory influences and requirements that their organisation is subjected to in order to examine whether certain modes of IOCM and control are incompatible with these influences and requirements. For example, it was shown in Subsection 6.5.1 that MarineCo's compliance with the SOX Act meant that the organisation should possess bureaucratic and highly formalised IOCM and control procedures in order to demonstrate to the external auditors and shareholders ethical and transparent management of IORs.

There follows a discussion of the contributions of this research to the literature of IOCM and control.

8.3.2. Contributions to literature

This research contributes that IOCM and control as a concept need not exclusively involve cooperative efforts (see Coad & Cullen, 2006), but competitive modes as well. It more specifically supports the views of Cox (1999, 2001, 2004) who argued that cooperative modes of cost management and control are not appropriate under all circumstances.

This research also supports the argument put forward by Free (2008) who argued that cooperative modes of IOCM and control may be “unrealistic in organizations that have their history and power relations steeped in hierarchical, autocratic and adversarial buyer-supplier relations” (p. 649; see Section 6.3). The research highlights, similarly to Coad and Cullen (2006), the existence of a fragile truce, rather than trust in relationships of asymmetric dependence between MarineCo and its suppliers and customers (see Section 6.2). On the one hand, it was shown in Subsection 6.2.2 that MarineCo established expectations among a number

of high performing suppliers that it would allocate them a satisfactory amount of orders upon a rank-based, competitive schedule (see also Cooper & Yoshikawa, 1994; Gietzmann, 1996; Johnsen & Ford, 2005), and on the other it was shown in Subsection 6.2.1 that it was seeking to meet customers' expectations in order to maintain prospects for future relationships with them. Particularly for relationships with customers, informal controls were important "in the wider context of relationship building" (Agndal & Nilsson, 2009, p. 100), such as in order to build reciprocity and embed the relationship.

Research at MarineCo also supports in Section 6.2 the views of Donada and Nogatchewsky (2006) and Cäker (2008) who argued that bureaucratic controls are employed along with informal controls by dominant organisations, whereas informal controls are important to organisations, which seek to preserve the relationship and mask, often temporarily, their underperformance from the dominant party. At the same time, Section 6.4 demonstrated that new technologies can address distrust through increased monitoring of suppliers at a distance (Frances & Garnsey, 1996).

This research also extends in Sections 6.4 and 6.5 the argument placed by Seal et al. (2004) on the role of institutionalised practices, distant stakeholders in the industry and new technologies to establish system trust and make the option of arm's-length type relationships attractive. These stakeholders, including customers and their self-regulating mechanisms as well as regulators and market analysts (see Subsections 6.5.2 and 6.5.3) conferred a sense of objectivity, predictability and, overall, trust (see also Mouritsen & Thrane, 2006; Seal & Vincent-Jones, 1997) in the enactment of arm's-length type controls, which agents at MarineCo highly

appreciated as they could see no other ‘generally acceptable’ or legitimate alternative to enact IOCM (see also Sydow & Windeler, 1997, 1998).

Moreover, this research addresses in Section 6.4 the argument of Kraus and Lind (2007) on the interdependences between an organisation’s internal control system and its IOCM and control practices. Similarly, it exemplifies Thrane and Hald (2006) who argued for a duality in the relationship between accounting controls and the context within which they are produced. At the same time, the research extends in Sections 6.3 and 6.4 the argument of Mouritsen et al. (2001) on the potential of modes of IOCM and control to influence the structure of the organisation that set these modes in place.

Besides, research at MarineCo addresses a gap in the literature of Maritime Economics, where it is acknowledged that little research has been undertaken in the cost management and control practices pursued by shipping organisations to the management of their IORs (Lagoudis & Theotokas, 2007; Theotokas, 2007). The research supports in Section 6.3 Theotokas (2007) who argued that shipping organisations are family-run businesses, which exhibit a highly paternalistic management style. Additionally, it also extends his findings as it showed that the highly paternalistic style of management at MarineCo was partly responsible for institutionalising distrust in the organisation, something which was also reflected in the IOCM and control practices enacted by the organisation.

Furthermore, the research showed in Section 6.3 contrary to Theotokas, that MarineCo addressed the absence of trust in relationships with suppliers through predominantly arm’s-length controls when he argued that it is trust that enables arm’s-length contracts. The research further extends in Subsections 6.5.2 and 6.5.3 his study by showing that MarineCo cost managed its

IORs with suppliers and customers through resorting to the cost and price assessment services offered by third parties. Finally, in Subsection 6.2.1 the research confirms the views of Lagoudis and Theotokas (2007) who argued that shipping organisations respond to their customers' requirements through adopting management controls that not only strengthen the relationship with them, but also support shipping organisations' efforts to align inter-organisational activities with their suppliers.

There follows a discussion of the contributions of the research to Stones' version of ST.

8.3.3. Contributions to theory

This research also contributed to a critical evaluation of Stones (2005), suggesting in Section 7.3 a number of theoretical concepts which can enhance its theoretical capacity to inform future studies of structuration in IOCM and control. A review of Stones' framework highlighted that it does not provide for specific concepts to illuminate the realm of action and its duality with structure. More specifically, it was argued that while Stones (2005) refers to the importance of both allocative and authoritative resources, he does not go as far as to highlight issues involved in their deployment, which is central to research of economic phenomena as IOCM and control is. It was argued that Stones (2005) places overt emphasis on the virtual, i.e. hermeneutic-phenomenological dimension of resources downplaying their deployment "as the medium of the exercise of power at the point of interaction" (p. 72).

In particular, it was proposed in Subsection 7.3.1 that the notion of multiple social systems can contribute to highlighting the ontological potential of certain theoretical concepts to inform Stones' (2005) account of active agency. It was argued that to perceive agents interacting

within and between social systems, suggests that they engage in action, whose main underlying principles transpose in the form of theories of action to different contexts. Transposability of theories of action to different contexts, however, provides scope for learning and change, which are pivotal to the development of skills and capabilities in the deployment of resources. Then, it was argued that learning and change suggests central role for such theoretical concepts as dialectics of control, isomorphism, path dependency, contradiction and praxis.

The argument, therefore, on the potential of these concepts to illuminate our understanding of active agency and the skilful deployment of resources was supported by the notion of multiple social systems. This is because these concepts emerge from the social embeddedness of agents in social systems, which may be positioned in a vertical as well as horizontal fashion (Dillard *et al.*, 2004). At this point, it was also argued in Subsection 7.3.1 that such conceptualisation of social systems not only contrasts Stones' articulation of position-practice relations as a single-level network of interconnected nodes, but also makes consideration of the previously mentioned theoretical concepts even more significant. This is because multi-level and overlapping social systems involve higher levels of uncertainty as well as power asymmetries, indeterminacy and serendipity. In relation to the above, this research also highlighted (see Section 5.3) that the concept of position-practice relations can be employed to examine processes of structuration among clusters of agents-in-focus, which are characterised by a consensus of their constituent agents' conjunctural understandings, general dispositions, actions and outcomes. This conclusion suggests that it may be relevant to examine the duality of structure at different levels of analysis through approaching multiple social systems and the position-practice relations that develop within and between them (see Subsection 7.3.1).

It was shown in Subsection 7.3.3 that the aforementioned theoretical concepts are implicated through praxis in its recursive interplay with structures of signification, legitimation and domination, and that domination structures are central to notions of economic performance. Praxis involves the instantiation of structures in specific spatiotemporal settings through all three forms of interaction, namely communication, power and sanctions. These forms of interaction, in turn, were argued in the same Subsection to provide the mediums through which dialectics of control, path dependency, isomorphic initiatives and contradiction materialise in specific time and place settings. Further, it was shown there that the contribution of these theoretical concepts is to enhance our understanding of the forces that implicate the skilful or otherwise deployment of resources to achieve economic performance.

The case findings at MarineCo demonstrated how explicit consideration of the aforementioned concepts illuminate our understanding of praxis and its role in reproducing and changing structures of domination, legitimation and signification. Incidents of contradiction, path dependency, isomorphism and dialectics of control influenced the organisation's IOCM and control practices, and therefore, the way agents at MarineCo deployed inter-organisational resources to achieve performance. In detail, Subsection 6.2.2 demonstrated, among others, the contribution of dialectics of control to highlight power asymmetries that both facilitated and hindered the skilful deployment of resources. A characteristic example from the case refers to the capacity of the procurement managers to by-pass the general manager's sanctions for constantly allocating orders to certain suppliers.

Moreover, the concept of contradiction highlighted forces that influenced the way IOCM and control practices were enacted and, therefore, resources were coordinated in MarineCo's

IORs. For example, Subsection 6.5.1 demonstrated how charterer and regulatory requirements for uninterrupted carrier services stimulated change of MarineCo's time-consuming supply IOCM and control procedure. This change resulted from the structural contradictions that agents' involved with procurement faced in respect of meeting charterer and regulatory requirements on the one hand, and the contradictory requirements of the procurement procedure on the other.

Apart from incidents of contradiction, however, path dependencies and isomorphic initiatives influenced the efficient and effective performance of MarineCo's IOCM and control practices. For example, Section 6.4 demonstrated that while procurement managers exhibited critical distance from what they perceived as ineffective conduct of the Checking office, they did not resist the founder's cost stringent prescriptions and reproduced the status quo because they lacked adequate power and knowledge to pursue change in the procedure. Finally, the efficient and effective management of MarineCo's IORs was influenced by isomorphic initiatives. For example, Subsection 6.5.2 demonstrated that the adaptation of MarineCo's IOCM and control practices with charterers was outcomes of coercive and mimetic isomorphism that involved independent causal influences from the market and the need to curb uncertainty in hire determination respectively⁴⁷.

In summary, the critical evaluation of Stones' framework in Section 7.3 concluded that future research of the conditions and processes involved in the structuration of economic phenomena can benefit if it accounts for the role of dialectics of control, path dependency, isomorphism, contradiction and praxis to enhance our understanding of the way resources are deployed in interaction.

⁴⁷ For a review of the concepts of dialectic of control, path dependency, isomorphism, contradiction and praxis refer to Subsection 7.3.2, p. 262.

8.3.4. Contributions to the research strategy

It was mentioned in Chapter 4 (see Section 4.2) that the case study was adopted to undertake the research because it is capable of investigating ‘how’ and ‘why’ certain IOCM and control practices develop and ‘what’ their effects are. The adoption of the case study enabled the researcher to examine *in-situ* processual issues in the practice of IOCM and control through obtaining an in-depth understanding of the opportunities and constraints arising from a web of interactions among position-practices, which illuminated processes of stability and change. Moreover, the case study enabled the researcher to incorporate agents’ views and also benefit from archival documents that triangulated his observations and agents’ responses, while simultaneously contributed a historical account to the research.

The researcher, however, would like to underline the demanding nature of case study research. For example, issues of access, trust and ethics (see Subsection 4.3.2), as well as the limited time resources available during a PhD, highlighted some of the challenges that the researcher faced following his choice to undertake qualitative research through a case study approach. It is not intended of course to argue that issues of ethics do not apply to other forms of research. Rather, it is argued that the personal involvement and immersion of the researcher with people at their work, posed additional concerns on issues of ethics (see Section 5.2). In this respect, the researcher would like to suggest to future researchers to not underemphasise the difficulties involved in undertaking case study research. For example, the researcher’s experience showed how issues of access at MarineCo hinged on issues of trust that inhibited the sharing of information among organisation members as well as access for research to suppliers and customers.

In summary, case study research offers good potential for deriving rich research evidence, as compared to e.g. surveys which tend to flatten *in-situ* variations in the studied phenomena because they adopt a distanced, cross-sectional perspective that inevitably misses the complexities involved in the development and change of the object of study. However, the demands and challenges that the case study involves relative to one's research objectives should also be considered prior to adopting this research strategy.

8.4. Researcher's account of personal experience and learning

While I have employed the 'third person' to write the thesis, I prefer to write in the 'first person' here in order to reflect on my personal experiences during the PhD.

I embarked upon this sponsored PhD by the Birmingham Business School, just after I had obtained an MSc in Accounting and Finance with distinction from the University of Birmingham in October 2005. I had always considered the PhD programme as the ultimate of my academic objectives and, therefore, I considered myself fortunate to have the opportunity to pursue this dream of mine.

As part of the School's scheme to equip new researchers with the necessary research training, I undertook a variety of modules, which introduced me to the available research methods and to the basic tenets and philosophical assumptions underpinning qualitative and quantitative research. In this respect, my understanding of such issues, which had only recently been developed following preparatory studying to undertake the MSc dissertation, was well equipped to anticipate the requirements of these modules. I owed my familiarity with such issues to the guidance of my lead supervisor who also supervised the undertaking of my MSc

dissertation. Nevertheless, I developed further my research skills through these modules, which opened up such issues involved in undertaking research as those of ethics. Given that I was seeking to embark on qualitative field research I made sure that I followed appropriate procedures to pursue an ethical research account.

Soon after I embarked on the PhD I was presented with opportunities and challenges opened up by my lead supervisor who had always been keen on guiding me to consider developments and debates in the field of IOCM and control. Remarks on my work and discussions with my supervisors often provided scope for learning as I was seeking to reduce the anxiety that my supervisors' feedback were causing, particularly in those cases where I needed to consider alternative avenues to address an issue. This process helped me to manage the uneasiness caused by the uncertainty inherent to any doctoral study.

Overall, my doctoral studies presented an excellent opportunity for expanding my perceptions of issues and phenomena related not only to my object of study, but also to the sphere of society in general. I very often had to defend my choice of course of action in the PhD, and moreover I also had to develop a level of confidence to support these choices, given challenges and new ideas introduced by other PhD colleagues in Birmingham and a number of academics during doctoral colloquiums and seminars in Birmingham, London, Essex and Paris. I would like to close this reflective account by arguing that the PhD process made me more mature, stronger and wiser in the sense of adopting a more pragmatic, rather than idealistic perspective in my life in general.

There follows a suggestion of themes worthy of future research.

8.5. Suggestions for future research

A research agenda for future investigation is offered here. It comprises suggestions for future research inspired from the refinements proposed in Stones' (2005) framework.

In detail, future research could focus on historical investigations of the praxis of IOCM and control. This involves the exploration of the duality of praxis with structure and investigation of the role that such concepts as dialectics of controls, contradiction, path dependency and isomorphism play thereto. For example, research at MarineCo showed that practices of IOCM and control were the means for maintaining the organisation's dominance over suppliers and for mediating its dependence on customers. However, research also showed that the IOCM and control practices were outcomes of those very conditions. Praxis of IOCM and control is constitutional to the reproduction of this duality and refers to actions and interactions, implying the potential for change and improvisation in the way IOCM and control practices are performed.

In addition to that, the research highlighted a recursive relationship between the practices of IOCM and control and the position-practices that performed them. It was shown that IOCM and control practices and their produced notions of performance were outcomes of the influences of these positions that shaped what constitutes legitimate and meaningful practice of IOCM and control. At the same time, however, the practices of IOCM and control reproduced position-practice relations by perpetuating power asymmetries between them and determining what is considered as meaningful and legitimate means for achieving economic performance.

It is proposed here that future research should take advantage of the duality of structure with praxis and focus on how IOCM and control practices are developed, maintained, diffused and changed. Future research can more specifically engage with the role of agents in influencing

through their position(s) how inter-organisational issues are to be addressed, what means are to be accepted as legitimate, effective and efficient and how should the outcomes of IOCM be distributed. At the same time, future research should also emphasise the role of praxis in embedding IOCM and control practices, position-practice relations and notions of economic performance as implicated by the aforementioned theoretical concepts.

Moreover, the notion of multiple and overlapping social systems provides impetus for further research on their implications in IOCM and control practices. For example, research at MarineCo showed that the practice of hire determination was largely influenced by resources provided by social systems horizontally aligned with agents' involved with customers and which were positioned across the organisation's boundaries. Further, the adoption of new systems of internal control was influenced by customers who possessed vertical position-practices with the organisation. It was argued that the social construction of social systems and their permeable boundaries permit examination of how practices of IOCM and control are produced, reproduced and negotiated among these social systems. Future studies of IOCM, therefore, should engage with different levels of analysis (see also Dillard *et al.*, 2004) where issues of co-evolution and isomorphism as well as contradiction and dialectics of control can surface. This requires, however, researchers to methodologically bracket different social systems and examine the role of position-practice relationships thereto to influence a multiplicity of structures, interpretations and interactions.

In particular, the concept of isomorphism and contradiction can contribute significantly to future studies of IOCM and control for they can illuminate the reasons behind cooperating organisations' reconciling opposing interests and expectations, in the case of structural

contradictions, and adopt practices of IOCM and control that are applied in other social systems, in the case of isomorphism. In this way, issues of power asymmetries, i.e. coercive isomorphism, the need for uncertainty reduction through the acquisition of knowledge, i.e. mimetic isomorphism, and the propagation of professionally accepted standards, i.e. normative isomorphism, all indicate avenues worthy of further research along with the notion of contradiction (see also DiMaggio & Powell, 1983).

The concept of contradiction can for example direct future research to consider how organisations participating in IORs manage to overcome tensions that may emerge from, for example, deeply embedded notions of individualism in achieving their economic performance versus an espoused need to cooperate with their counterparts and survive. Furthermore, the notion of contradiction can inform future research to examine the extent to which cooperative IORs and related cost management arrangements are sustained as a result of trust between the parties or as a result of mutual dependence facilitated by an accepted truce (see also Coad & Cullen, 2006) of structural contradictions impinging on the relationship. The notion of contradiction can also contribute to an examination of how learning and change of IOCM and control practices can be motivated at the individual level between what one ‘knows’, and what one experiences in the form of unintended consequences implicated by other powerful agents-in-context. At this point, further research could also examine the potential of co-evolutionary processes to influence the importance or lack thereof of accounting information in constituting IOCM and control practices. For example, research at MarineCo showed that open-book accounting was dismissed in relationships with customers because industry practice stimulated normative and mimetic

isomorphism at MarineCo, which embraced the practice of hire determination by resort to the market assessments provided by professional organisations.

In this respect, Coad and Herbert's (2009) recent extension of Stones' framework could potentially contribute a valuable means for examining the aforementioned issues. In summary, future research can greatly benefit from historical and contextualised studies adopting a structurationist perspective. This is because a structurationist perspective allows examination of the duality of praxis with structure, the implications of contradiction, path dependency, isomorphism and dialectics of control thereto, and the potential of defining different levels of analysis to examine these issues among vertically or horizontally related social systems.

APPENDIX

1. A Guide to the Case Study Research

Introduction

This guide is to be used as a point of reference for my case study research at MarineCo. It provides the organisation's profile, the research objectives in terms of themes worthy of further investigation as derived from the literature, the research questions, the research evidence collection methods, and the procedures for analysing and interpreting that evidence.

Organisation Profile as obtained from MarineCo's official documents

"MarineCo was founded in Piraeus, Greece by a well known today Greek ship-owning family. The Organisation manages and operates a diversified fleet consisting of tanker, container and dry cargo vessels currently numbering 64 ships of approximately 6.7 million deadweight tons (dwt). The organisation has also been listed on a Stock Exchange since early 00's.

MarineCo is certified under ISM code, ISO 9002 and ISO 14001, making it one of the first major shipping organizations to be accredited by Lloyd's Register. Today, it ranks among the top five largest Greek ship management companies and is one of the ten largest tanker companies in the world.

One of the main contributing factors to the organisation's growth, success and repute is its focus on providing quality customer service and its commitment to building long-term relationships with oil majors, state-owned oil companies and first-class charterers. The importance of maintaining such strategic alliances has encouraged MarineCo to institutionalise its maritime safety culture through the training and education of seafarers in organisation-sponsored naval academies and through continuing seminars in its Piraeus headquarters for both seafaring and office personnel".

Research objectives

The research objectives of this case study is to obtain an understanding of the IOCM and control practices of MarineCo by considering the intra- and extra-organisational issues that have influenced their development. The research objectives were articulated following a literature review in the cost management and control of IORs and refer the themes for further research that were identified thereto. In this respect, the research initially aimed to investigate the perspectives on issues of IOCM and control of key counterpart organisations both upstream and downstream MarineCo. However, initial contacts with management prior to getting access to the organisation suggested that this proposal cannot materialise. Under these circumstances, the objectives of the research were set to:

1. Investigate how processes of embedding trust or a dominating perspective within MarineCo, through e.g. the management style of powerful individuals, previous experiences and routines, influence the modes of IOCM and control it enacts, i.e. formal and/or informal, accounting and/or non-accounting based, cooperative and/or competitive?
2. Consider the processes through which agents or groups of agents constituting industry practice implicate power asymmetries and trust, or lack thereof, in MarineCo's IORs, influencing its choice of IOCM and control modes, i.e. formal and/or informal, accounting and/or non-accounting based, cooperative and/or competitive.
3. Examine whether certain modes of IOCM and control are relevant for MarineCo, which is an organisation whose nature of activities does not involve IORs that refer to intensive coordination efforts, e.g. joint product design, joint investments in production processes and research and development. The objective is to examine whether modes of IOCM and control are relevant to organisations engaged in more superficial IORs, e.g. management controls to reduce risk and further embed the relationship.
4. Investigate potential interdependencies between internal and inter-organisational control processes to examine whether they influence the nature of IOCM and control modes employed at MarineCo, i.e. formal or informal, accounting and/or non-accounting based, cooperative or competitive.

5. Understand how MarineCo's IOCM and control practices have changed in recent years and how this has impacted on or is likely to affect the management of the organisation's IORs in the future.

These research objectives guided case study research at MarineCo through more specific research questions that were addressed in keeping with Stones' version of ST.

Research Questions

1. What are the IOCM and control practices of MarineCo? Do these support a cooperative and mutually beneficial or a competitive approach? Are they formal, accounting-based and bureaucratic or informal?
2. Why has MarineCo established these IOCM and control practices and how have these practices been maintained or changed in recent years?
 - 2.1 What has been the role of characteristics pertinent to MarineCo's organisational structure in embedding a cooperating and trusting or a competitive and dominating perspective to the cost management and control practices of its IORs? How did this take place?
 - 2.2 What has been the role of relational organisations such as suppliers and customers or other significant agents outside MarineCo such as regulatory bodies to influence the cost management and control practices MarineCo enacts in its IORs? How did this take place?
3. What are the intended and unintended effects of MarineCo's IOCM and control practices and how have these affected or are likely to affect in the future the management of the organisation's IORs?

Research Methods

Following clarification of the research objectives and research questions, a sound research design should also embrace consideration of the research methods that are relevant to the purposes and nature of the research. This research aims to conduct an *explanatory case study* with the view to extend theoretical understandings in the cost management and control of IORs. The focus of

study is to examine the *form* that IOCM and control takes at MarineCo, the *reasons* for which it takes such form, and the *way* in which such controls are exercised to coordinate relationships with suppliers and customers.

The research, therefore, adopts a *processual approach* aiming to engage in a historical investigation of the organisation's IOCM and control practices.

The case study at MarineCo will be conducted through a three-month period where the researcher will be visiting on a daily basis the organisation in pursuit of his research agenda. A primary research method that will be employed is observation, as the researcher will be attending on a basis the flow of business at MarineCo. In detail, he will be attending discussions and meetings⁴⁸ and initiating informal conversations with senior and lower staff. Therefore, research evidence will be gained through his involvement in the organisation. The research shall draw attention on the accounts department, the procurement, supplies, technical and operation as well as the chartering and control departments. Any observations and reflections will be recorded in a journal which will be updated daily.

The researcher decided that his position at MarineCo will be overt and confidentiality of sources of information was agreed at the contact phase with MarineCo top management on the basis of the researcher protecting the anonymity of respondents and the organisation in general. No feedback of the research report was required and the researcher had to commit that he would protect the work relations of individuals within and outside MarineCo.

Additionally, the research would comprise semi-structured interviews with most of the senior managers and staff below senior management level. This means that the opinions of various individuals – i.e. managers and personnel from various areas of the organisation and not only from the supply, procurement and accounts department – will be asked to gain a broader understanding of the organisation and inter-organisational issues impinging on MarineCo's IOCM and control. I cannot specify the exact number of interviews and duration but my aim is to conduct as many as possible. I embark, however, on an initial target of approximately 30 interviews with an average duration of 30 minutes each. The interviewees will be asked questions

⁴⁸ Upon entrance to the organisation it turned out that participation at meetings was not allowed.

that will help, through illuminating the main aspects of Stones' framework, to address the research questions. The interviews will be conducted in Greek, which is the mother tongue of the informants, and will be tape-recorded, translated and transcribed.

Finally, the researcher will use document evidence as an additional method to triangulate research evidence from interviews, discussions and observations. His search for documents can comprise e-mail exchanges between MarineCo and its suppliers and customers, minutes of meetings, internal reports, contracts, policies and procedures' manuals. The researcher, however, expects to meet some difficulties concerning access to some documents particularly those including sensitive information. As a solution to that, the researcher intends to obtain documents with the promise that any figures and names will be disguised.

A semi-structured Interview Guide (To be translated in Greek), and which is intended to be used as an aidé memoire⁴⁹

"The purpose of this interview is to assist me obtain understanding of the impact the organisation's inter-organisational cost management and control mechanisms have on its relationships with suppliers and charterers. For example, I seek to examine to what extent the accounting and control system of the organisation has changed in recent years and what are its connections or interdependencies with the inter-organisational cost management and control practices of the organisation? Or to investigate whether MarineCo's IOCM and control practices facilitate cooperation to control and reduce costs, as we well as the factors facilitating and hindering its asserted commitment to establishing strategic alliances.

All responses will be treated with the strictest of confidentiality. Your name will not be disclosed and only summarised quotes will be published. The thesis, upon submission will be publicly available; however, this should not pose any risks to you being identified as the labels that will be employed to describe your position will be abstract enough to impede traceability of your identity. Your time and cooperation is very much appreciated".

⁴⁹ It turned out that the researcher had to change the Interview Guide after he entered MarineCo; see Chapter 5.

Part A: Background of Participants (General)

1. Gender
2. Age Group Below 30 31-40 41-50 51-65
3. Position held
4. Years in that position and years in the organisation
5. Department where position refers to
6. Main responsibilities of position
7. Highest educational qualification
8. No. of people you are currently supervising

Please answer the following questions as these apply to your position:

1. How would you define the overall context within which inter-organisational activities take place? Who is involved in that context and what is the role of other groups in the organisation?
2. How does your position relate to this context? To whom do you have to report and is it taking place directly or indirectly?
3. How does this context influence the nature of IORs with suppliers, customers and partners and the management controls you employ therein?
4. Has the organisation or your department been required to adapt to any specific requirements or constraints posed by that context and how did you react to that? Have these requirements influenced the management control of your relationships with suppliers, customers or partners and how these interrelated with changes in the control system of the organisation?
5. How do you think this context is likely to influence the nature of the IORs pursued, the benefits accrued, and the nature of their management control in the future?
6. If you are asked to describe what is your understanding of IORs in general, their purpose, benefits and requirements for control what would you say?
7. What is your perception of the organisation's IORs?
8. Do you think this is a perception prevailing across the organisation? If not, where do you see any differences?
9. What is your background and what skills do you believe are required for managing IORs?
10. Has there been any incident or requirement that altered the management control of IORs? If yes, how do you feel about the changes effected?

11. How do you think the management control of the organisation's IORs should change in the future?
12. How do you feel about your duties? How do these relate to the management of the organisation's IORs?
13. How is your role perceived by others in the organisation or out of it and how do they influence your work?
14. What do you think are the necessary skills that helped you undertake your duties and how did you need to develop these skills?
15. How do you think your duties changed in recent years and who brought about this change?
16. What is the nature of the management controls enacted? What is the use of collaborative cost management controls in IORs? Can you define any mutual cost benefits accrued from cooperating with suppliers and customers?
17. Do the same controls apply for relationships with suppliers, charterers and partners?
18. To what extent do you rely on reputation, trust, personal relations and power to pursue IORs? How are management controls influenced in this respect?
19. How do you feel others in the organisation or in the counterpart organisations make use of such relational attributes? Do they perceive the way management controls are employed in IORs brings mutual benefits?
20. How do you perceive the nature of IORs and their management control to change in the future? How will you be involved in that change?
21. What are the procedures through which you set up and monitor relationships with suppliers, charterers and partners?
22. How do you manage to achieve mutually beneficial cost efficiencies from the management of IORs with suppliers, charterers and partners? Could you give some examples?
23. Do you have to make concessions in order to establish and strengthen IORs or do you resort to coercive mechanisms to get what you want?
24. Does openness of transactions in terms of cost disclosures between the organisation and its counterparts form part of a management control strategy to improve the relationship to the mutual benefit of the parties?

25. How has your practice of management control of IORs changed in recent years? Has there been any change on procedures and techniques to control IORs and where did they emerge from?
26. How these changes influenced your work and what were the consequences for the work of others to whom you refer or relate to?
27. How do you see practice of management control of IORs to be getting to in the future? What do you think will be the basic characteristics and purposes of such controls?
28. How do you judge the results from your practice of management control of IORs?
29. Are there any cases where changes in practice of management control of IORs brought results that you had not expected before? And if yes, in what sense? If no, what did these changes help you achieve?
30. Is there anything you feel you would like to change in the practice and management control of IORs? And if yes, why do you think so?
31. Is there anything you feel that needs to be changed in the way IORs are established and thereafter managed, but which you feel unable to do on your own? And if yes, who do you think could be of help?

At the end of the interview I will ensure once again the participants for the confidentiality of their response and that only summarised data will be published.

Research Evidence Analysis and Interpretation

Analysis of the research evidence will be informed by Mason (2002) and Miles and Huberman (1994) and will be based on the following list of codes that will be applied to the research evidence. The codes will be applied to interview transcripts, journal and documents, where applicable, and then the coded chunks that are assigned the same code will be accumulated in separate documents where comparability between the chunks and patterns generation will be easier to pursue. The aim is to identify certain patterns or themes to answer the research questions.

In this research, Stones' quadripartite framework and his use of position-practice relations will be employed to guide the research and the interpretation of evidence. The codes are derived from the

constituent elements of the quadripartite framework and are then applied to research evidence to distinguish among four categories of IOCM and control, namely: formal IOR cost management practices, informal IOR cost management practices, formal IOR control practices and informal IOR control practices. These categories emerged from the themes identified in the literature review as worthy of further research with the purpose to guide analysis and interpretation of the research evidence and ultimately to address the research questions (Miles & Huberman, 1994).

Table 1 presents the coding scheme that was employed to index the research evidence, while Table 2 presents definitions for each of the codes:

Table 1 The Coding Scheme				
Concepts of the Quadripartite Framework	MarineCo and its inter-organisational context viewed from a web of position-practice relations			
	Agents within the department	Agents outside the department but within MarineCo	Agents in relational organisations (e.g. suppliers and customers)	Other significant agents outside MarineCo (e.g. regulators)
External structures	ED	EM	ER	EO
Conjuncturally-specific views	CD	CM	CR	CO
General dispositions	GD	GM	GR	GO
Actions	AD	AM	AR	AO
Outcomes	OD	OM	OR	OO
Categories of IOCM and control underpinning the literature-informed research questions				
1. Formal IOR cost management practices				
2. Informal IOR cost management practices				
3. Formal IOR control practices				
4. Informal IOR control practices				

Table 2				
Definition of Codes that align the elements of the Quadripartite framework with different clusters of position-practices				
Concepts of the Quadripartite Framework of ST	MarineCo and its inter-organisational context viewed from a web of position-practice relations			
	Agents within the department	Agents outside department within MarineCo	Agents in relational organisations (e.g. suppliers and customers)	Other significant agents outside MarineCo (e.g. regulators)
External structures/ Definition	The researcher's or interviewee's <i>observations</i> and <i>reflections</i> of structures that both enable and constrain IOR cost management and control practices or any other related practices (reflecting the themes identified), and which [...]			
Definition of Codes (Contd.)	[...] emerge from agents within the department of the interviewee.	[...] emerge from agents outside the department of the interviewee but within MarineCo.	[...] emerge from relational organisations such as suppliers and buyers.	[...] emerge from agents outside MarineCo such as regulators.
Codes	ED	EM	ER	EO
Conjuncturally-specific views/ Definition	The interviewee's comments on his/her conjuncturally-specific understandings of the possibilities and constraints to exercise IOR cost management and control practices or any other related practices (distinguished in themes) and which emerge from agents [...]			
Definition of Codes (Contd.)	[...] within his/her department.	[...] outside his/her department but within MarineCo.	[...] in relational organisations such as suppliers and buyers.	[...] outside MarineCo such as regulators.
Codes	CD	CM	CR	CO

General dispositions/Definition	The interviewee's comments on his/her embraced views, values and principles for action that demonstrate how he or she <i>aspires, expects or commits</i> IOR cost management and control practices or any other related practices (distinguished in themes) <i>to be</i> [...]			
Definition of Codes (Contd.)	[...] performed by agents within his/her department.	[...] performed by agents outside his/her department but within MarineCo.	[...] performed or conditioned by suppliers and buyers.	[...] performed or conditioned by agents outside MarineCo such as regulators.
Codes	GD	GM	GR	GO
Actions /Definition	The interviewee's comments on how IOR cost management and control practices or any other related practices (distinguished in themes) <i>are</i> [...]			
Definition of Codes (Contd.)	[...] performed within his/her department.	[...] performed by agents outside his/her department but within MarineCo.	[...] performed or conditioned by suppliers and buyers.	[...] performed or conditioned by agents outside MarineCo such as regulators.
Codes	AD	AM	AR	AO
Outcomes/Definition	The interviewee's comments on outcomes from the exercise or implementation of IOR cost management practices or any other related practices and which emerge from agents [...]			
Definition of Codes (Contd.)	[...] within his/her department.	[...] within MarineCo.	[...] in relational organisations such as suppliers and buyers.	[...] outside MarineCo such as regulators.
Codes	OD	OM	OR	OO

Definition of Themes derived from the literature-informed research questions	
1. Formal IOR cost management practices comprise:	Modes of IOCM, namely: value chain analysis, total cost of ownership, target costing, process studies, benchmarking analyses, competitive bidding practices.
2. Informal IOR cost management practices comprise:	Modes of IOCM not included in the above and which may include, for example, telephone calls to negotiate better cost and credit terms from suppliers and to avoid penalties and claims from customers/charterers.
3. Formal IOR control practices comprise:	Modes of management control that may involve such controls as open-book accounting, integrated information systems (such as inventory management systems), rank-based rewards and incentive schemes, self-regulation mechanisms (such as fees, penalties and transfer prices) as well as contractual agreements. Moreover, they may comprise manuals, e.g. functional specifications or ordering and supply procedures. Formal management controls may also refer to supplier or partner selection and certification as well as multi-functional and inter-organisational meetings.
4. Informal IOR control practices comprise:	Prior experience with the partner, culture fit, trust, bonds of kinship, power and (inter)dependence.

Conclusion

This case study guide intends to facilitate the researcher in his research at MarineCo and subsequently in his research evidence analysis and interpretation. It does so by bringing together the research setting's profile, the research objectives, the research questions, the research methods and the steps that were taken to analyse and interpret the research evidence.

2. Interview Schedule

Position	Department	Date of Interview	Duration
General manager	-	26/09/2007	1h 15 min
Human resource manager	Human Resources	18/07/2007	52min
Chief marine officer	Operations	12/07/2007	15min
Chief operating officer	Operations	04/07/2007	1h 33min
Operations manager	Operations	17/07/2007	35min
Husband captain	Operations	11/07/2007	15min
Husband captain	Operations	09/07/2007	43min
Technical manager	Technical	26/07/2007	1h 10min
Superintendent engineer	Technical	12/07/2007	47min
Cost estimator	Technical	07/08/2007	1h 23min
Cost estimator	Technical	17/08/2007	57min
Spares manager	Technical	16/07/2007	47min
Spares manager	Technical	09/08/2007	53min
IT manager	Technical	05/09/2007	1h 32min
New-buildings manager	Technical	10/09/2007	53min
Accounts manager	Accounts/Treasury	18/07/2007	25min
Accounts manager	Accounts/Treasury	02/08/2007	32min
Accounts manager	Accounts/Treasury	07/08/2007	14min
Internal auditor	Internal Audit	09/07/2007	1h 17 min
Internal auditor	Internal Audit	23/08/2007	43min
Internal auditor	Internal Audit	28/08/2007	23min
Checking handler	Checking	23/08/2007	36min
Quality and Safety officer	Quality and Safety	06/07/2007	23min
Procurement manager	Procurement	21/08/2007	53min
Procurement manager	Procurement	24/08/2007	22min
Procurement handler	Procurement	12/07/2007	54min
Control handler	Control	18/09/2007	36min
Control handler	Control	25/09/2007	27min
Bunker's manager	Bunkers	19/09/2007	1h 14min
Chartering manager	Chartering	14/09/2007	57min

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